HONG KONG

a Securitisation Financing Hub for Infrastructure and Small and Medium Enterprises

AAIL ASIAN ACADEMY OF INTERNATIONAL LAW

APSA
亚太结构融资公会
Asia-Pacific Structured Finance Association

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Contents

FOREWORD

Paul M.P. Chan

GBM, GBS, MH, JP, Financial Secretary

As a small and open economy, Hong Kong's economic prosperity over the past decades was largely attributed to our ability to respond effectively to challenges and embrace opportunities. Hong Kong, like the rest of the world, is now facing various challenges arising from the changing global economic and political landscape. Nonetheless, we are also presented with unprecedented and immense opportunities as our country takes forward the two important national strategies – Belt and Road initiative (BRI) and Guangdong-Hong Kong-Macau Greater Bay Area (GBA) development.

Against the above backdrop, the release of the Report by the Asia-Pacific Structured Finance Association provides a timely response to the opportunities available and sets out the policy roadmap for developing Hong Kong into a securitisation financing hub.

The HKSAR Government is committed to enhancing the competitiveness of Hong Kong as an international financial centre. Indeed, our core attributes – the rule of law, free flow of capital and information, internationally-trusted standards and regulations, world class financial infrastructure and highly experienced professionals – remain sound and strong. We have been elevating the role of Hong Kong financial services sector in the BRI and GBA development. We also cherish closer collaboration with members of the sector to devise policy recommendations and innovative options on which we can leverage Hong Kong's competitive advantages to serve the need of the country and at the same time to propel Hong Kong forward.

The Report has succinctly depicted a promising and lucrative picture for developing Hong Kong into a securitisation hub for infrastructure projects and small and medium enterprises loans. For that, I am thankful to the Asia-Pacific Structured Finance Association for their efforts in setting out clear and useful policy recommendations which will form a meaningful basis for further discussion among stakeholders.

Paul M.P. Chan GBM, GBS, MH, JP

Financial Secretary

Hong Kong Special Administrative Region Government

FOREWORD

Eddie Yue

JP, Chief Executive - Hong Kong Monetary Authority

I am pleased to provide this foreword to welcome the release of this Report which has succinctly and effectively identified the potential of Hong Kong as a securitisation financing hub.

No doubt the Belt and Road Initiative and the Greater Bay Area development plan are presenting great opportunities for many areas. Amongst these, the Report has most appropriately pointed out the potential use of securitisation as a tool to channel international capital to satisfy the funding needs created by infrastructure projects and SME business expansion. I agree that Hong Kong, with its world class project finance expertise, accounting and legal services, taxation and dispute resolution system, is in a good position to play the role of a securitisation hub. If successful, this will bring about huge benefits for many sectors such as banking, asset management, legal, engineering, and other professional services.

In fact the HKMA has come to similar conclusions separately although our focus is more on global infrastructure. Securitisation is not new to Hong Kong. The Hong Kong Mortgage Corporation (HKMC), which is wholly-owned by the Hong Kong SAR Government through the Exchange Fund, is a pioneer in this area in the Region. It has issued a total of HK$13.2 billion mortgage-backed securities (MBS) since 1999, and has helped develop the local secondary mortgage market through purchasing mortgage loans from banks, and packaging the loans into MBS for investors with standardisation of product structure and documentation.

Leveraging its experience in mortgage loan securitisation and eyeing on the huge infrastructure financing gap around the globe, the HKMC has recently launched an Infrastructure Financing and Securitisation business. It is now in the process of warehousing global infrastructure loans from banks with a view to packaging and securitising them at an appropriate time in future. The business is making encouraging progress with strong interest demonstrated by banks.

The Report has also rightly pointed out that the road to a securitization hub is not without obstacles. Securitisation of heterogeneous infrastructure and SME loans will be significantly more challenging than mortgages with limited successful precedents. As pointed out by the Report, there are complex legal, regulatory, accounting and taxation issues to be resolved. This is precisely why I sincerely appreciate the issuance of this Report, being timely and helpful to bring about the much needed market collaboration. With that, I would like to thank the Asia-Pacific Structured Finance Association for leading the working group to produce such a constructive Report.

Eddie Yue JP

Chief Executive

Hong Kong Monetary Authority

Anthony Francis Neoh

QC, SC, JP, Fellow of the Hong Kong Academy of Finance

In the most well-known survey of the competitiveness of international financial centres, the GFCI (Global Financial Centre Index), conducted since 2007, Hong Kong has consistently been placed third, after New York and London. This is because Hong Kong has a world class legal and financial regulation system, world class financial infrastructure and world class talent serving not just the population in Hong Kong, but also the still strongly developing economy of the Chinese Mainland connecting it to the rest of the world. I believe that this Report, setting out the last remaining steps that are needed to make Hong Kong, the undoubted Securitisation Hub of Asia, has come at a timely juncture in the development of Hong Kong. Let me explain why!

First, let us focus on the Greater Bay Area, the "GBA" in short. The GBA is comprised of the vast land mass of Guangdong, Macau and Hong Kong. Its population is concentrated at the Pearl River Delta, in a conurbation of the 9 cities which include Hong Kong. The three largest cities in this conurbation are Guangzhou, Shenzhen and Hong Kong. 30 years ago, Guangzhou had a population of about 1.5 million, Shenzhen about 200,000, Hong Kong, about 5 million. Now, Guangzhou and Shenzhen each has a "hu kou" registered population of about 12 million (the actual population is far more – estimated at close to 20 million for each city), and Hong Kong's population is pushing 7.8 million. The trajectories of growth in this "Tale of 3 cities" have been very different, but they have been complementary in many ways.

All three cities have grown because of immigration. Guangzhou and Shenzhen have grown because vast infrastructure and satellite cities were built and urban renewal had been undertaken at fast pace, creating jobs and opportunities and attracting the best national talent, including many who have returned from overseas studies. That is why the GBA is home to some of the largest tech companies in China in almost every field, including Hua Wei, Ping An, ZTE, Byd, and also some of the largest real estate companies in China, and a supply chain supplied by the largest concentration of Small and Medium Enterprises in the Mainland. Both Guangzhou and Shenzhen have the highest service sector concentration, as can be seem from their presence in the Gross Domestic Product of these two cities, in fact slightly over 60% which is way above the national average of 51%.

Hong Kong has also attracted an enlarged population, including world class international talent and the training of our own to the world class standards from immigration. The development trajectory Hong Kong has followed has been in the service sector, which now accounts for 93% of our Gross Domestic Product.

In the last 30 years, Hong Kong has contributed to the development of the GBA through its service sector by bringing in investment, initially through HK entrepreneurs and in the last 20 years, through the international capital markets as Hong Kong's capital markets grew into one of the world's largest capital markets. I had the privilege of taking part in the design and negotiation for the legal structure and listing rules for H shares in 1992 together with my colleagues in the stock exchange and the SFC. H shares now take up over 60% of the market capitalisation of our stock markets. I was able to do that with my colleagues in the Stock Exchange and the SFC in 1992 because the vision of Zhu Rongji, who said to me and my colleagues that going to the international markets not only enabled international investment to be channeled into Chinese enterprises but they would also bring international best practices of corporate governance, management and regulatory standards into China. That in a nutshell is what Hong Kong is about! Hong Kong punches far above its weight because it has the most complete financial regulatory and legal system which an international market requires.

The explosion in H shares have created a large crop of Fortune 500 companies in China, Ping An for example is an H Share Company, as are the largest banks in China, and some of the largest real estate and tech companies. The Hong Kong banking system supports these companies very well and this alone provides sizeable business for Hong Kong. Financial services cover close to 20% of our GDP and supporting some 260,000 people in direct employment in the sector, out of a total working population of 3.9 million. There is much scope for creating more jobs in the financial sector in Hong Kong by the securitisation proposals in this Report.

These securitisation proposals will complete the last remaining elements which will make HK into the “International Hub for Securitisation” of Asia, catering to international infrastructure projects and the securitisation of Small and Medium Enterprise Financing in the Greater Bay Area. That will create a revolution in at least the same scale as that of H Shares, if not more. The requirements for making HK such a Hub are not different to the legal, regulatory and market conditions which already exist for H Shares. The Shares Connect and Bond Connect of the HK Stock Exchange already provides a ready market infrastructure. Standardisation of financing structures and documentation will be of great importance, that is what is great about H Shares. They operate under corporate governance structures, secondary market, regulatory structures and dispute resolution machinery, which are standardised. What is needed is support from the Government of the HKSAR, the Guangdong Government and the Central Government to create a platform for such standardisation. I believe the Macau Government will also have a role to play in linking us with the Portuguese and Spanish speaking countries of South America.

There is the final important issue of exchange control. Hong Kong is already the largest CNH market but financial transactions and investment into and out of China has remained difficult, due to the various foreign exchange controls in China’s capital account. This is where the well-regulated and efficiently functioning international financial market of Hong Kong can come in. The SAFE has already approved many banks in the Mainland to receive foreign currency and exchange them into RMB under pre-approval. This has operated well with QFII and RQFII, which now has no quotas. Private Equity investments have since worked under the same system of pre-approval through local forex clearing banks. The same system could apply to securitized products in the Greater Bay Area.

A grander idea is for the GBA Governments to create a Clearing and Development Bank , which will have a large pre-approved quota annually negotiated with the SAFE, and then provided to all GBA banks with international business through a system based on prudential principles, such as integrity of the systems of the participating bank and the capability of each participating bank in terms of capital and expertise to deal with the volume of transactions implied in the quota allocated to it. The capital account would then be regulated through this Clearing Bank. This Clearing Bank can also function as a development bank for the promotion of infrastructure and social financing in the GBA, such as providing credit enhancement to securitized projects and to acting as lead institution in financing infrastructure.

There is great promise in the GBA, and the Securitisation Hub is well within our grasp!

Anthony Neoh QC, SC, JP

Fellow of the Hong Kong Academy of Finance

Susie Cheung

Co-Convenor, Asia-Pacific Structured Finance Association

Reflections on Development of the Securitisation Sector in Hong Kong: The Way Forward

Setting Up of the Mortgage Corporation and Securitisation in Hong Kong

The phrase "It was the best of times, it was the worst of times…" so famously remarked by Charles Dickens in "A Tale of Two Cities" would similarly be apt to describe Hong Kong's housing market situation back in 1996. In the Insight provided by Mr Norman Chan, former Chief Executive of the Hong Kong Monetary Authority (HKMA) in August 2019, he refers to the feverish mood in Hong Kong in the late summer of 1996 when people in Hong Kong were frenetically speculating on properties in anticipation of the continuing rise in property prices. Almost one in every seven housing units changed hands in a year, while mortgage loans increased at quite an alarming rate of about 25% in 1996 – 1997. It was against this background and to safeguard against the bubble bursting and causing a severe liquidity squeeze in the banking system that the HKMA proceeded with the setting up of a mortgage corporation, along the lines of Fannie Mae and Freddie Mac in the US. The primary goal for the setting up of this entity was to develop securitisation and to facilitate the development of the local financial markets. This entity came to be known as "The Hong Kong Mortgage Corporation Limited" (HKMC).

Development of the Securitisation Market in Hong Kong

Since its establishment and under the guidance of the HKMA, the HKMC has done much to help develop the securitisation market in Hong Kong by buying residential mortgage loans in order to release and recycle liquidity back to the banking system. In tandem with its establishment, the HKMC published its mortgage purchasing criteria for banks which might otherwise wish to offload their mortgage loans to the HKMC from time to time. The prudent underwriting criteria required by the HKMC have the effect of encouraging banks to maintain the quality of their mortgage loans such that even though Hong Kong has gone through several financial crises, such as the Asian Financial Crisis (1997-1998) and the Global Financial Crisis (2008), in the last two decades, the highest delinquency rate for residential mortgage loans was only 0.42%, observed in 2000.

To facilitate the sale and transfer of the mortgage loans by the banks to the HKMC and amongst the market participants, the HKMC worked with the banking industry to standardise the documentation for residential mortgages (in 2001 and 2003). In striving to promote the development of the mortgaged-backed securities (MBS) market in Hong Kong, the HKMC established two securitisation programmes: a Guaranteed Mortgage-backed Securitisation Programme in 1999, and a multi-currency, conventional bond style Bauhinia Mortgaged-backed Securitisation Programme in 2001. During the Asian Financial Crisis in 1998, banks in Hong Kong were keen to sell their mortgage loans to the HKMC for cash in order to counteract the effects of the liquidity squeeze provoked by the crisis. However, since the quality of the mortgage loans had, during the financial crises, proven to represent some of the best quality assets in the banks' portfolios, banks have become less willing to part with their mortgage assets after the property market has recuperated from its trough in 2003.

Apart from the single securitisation involving the toll revenue generated by the five tolled tunnels and one bridge which the HKSAR Government undertook in 2004, the securitisation market in Hong Kong has since remained quiet with no notable securitisation transactions, with assets originated locally, being executed in Hong Kong.

The Belt and Road Initiative (BRI) and the Greater Bay Area (GBA)

The announcement by President Xi Jinping of the BRI in 2013 heralded the arrival of a global development strategy by China involving infrastructure development and investments. It is estimated that 2,600 deals have been signed up under the BRI involving a total estimated amount of over US$4 trillion: a critical mass of infrastructure loans is being built up under the BRI which could, subject to their being commercially viable, be feasible for securitisation in due course.

The designation by the Central Government of Guangdong-Hong Kong-Macau as the Greater Bay Area, which has been accorded the status of key strategic planning in China's development blueprint, will further provide a vast array of opportunities for Hong Kong. With a high concentration of small and medium enterprises (SMEs) located in the Greater Bay Area, and where the need for SME financing is immense, the availability of securitisation could encourage the banks to make the loans more readily available to SMEs in the knowledge that the availability of the securitisation of such loans could allow the securitised proceeds to be recycled for new lending to SMEs. The early experience in securitisation which Hong Kong has acquired could put it in good stead to lead the charge in developing new pioneering uses of securitisation, not least in the realms of infrastructure and SMEs.

Recent Initiatives by the HKMA to Facilitate Infrastructure Investments and Financing

Seizing the opportunities offered by the above significant developments in the region, the HKMA in 2016 established the Infrastructure Financing Facilitation Office (**IFFO**) to act as a catalyst to enhance Hong Kong's status as an international financial centre, and use the depth of its financial markets to direct investment towards infrastructure. This was then complemented in 2019 by the Infrastructure Financing and Securitisation (**IFS**) business set up by the HKMC, which has a mandate to purchase and co-finance infrastructure loans and securitise them after accumulating a diversified portfolio.

Way Forward: Towards Promoting Hong Kong as a Securitisation Financing Hub

In its role as a securitisation industry association, the Asia-Pacific Structured Finance Association (APSA) has felt the need to focus the attention of all the relevant stakeholders by producing a Report which succinctly identifies the potential of Hong Kong as a securitisation financing hub with the use of securitisation as a tool to satisfy the huge funding gaps faced by the infrastructure projects around the globe and the SME businesses. Leveraging on its world class financial infrastructure and its pool of highly experienced professionals, Hong Kong stands an excellent opportunity of developing into a securitisation hub, provided however that the existence of an efficacious ecosystem with supportive laws, tax and regulations, and a proactive dispute resolution centre as identified in the Report is established to support the operations of a robust financing hub for securitisation.

Members of the Report team who are market practitioners have identified various forms of legal, regulatory and agency support which will need to be implemented by the HKSAR Government if the goal towards developing Hong Kong into a securitisation financing hub is to be attained. The HKSAR Government could take the lead by announcing the development of Hong Kong into a securitisation financing hub as a Government initiative, and establish a close collaboration with stakeholders from the banking sector and other related professional bodies by devising policy recommendations and innovative options that take into account the market's needs.

The community in Hong Kong has experienced some of the most challenging times in recent months. It is to be hoped that the initiative could act as a rallying call to galvanise the support of all the relevant stakeholders in Hong Kong to work together with the policy makers and regulators, and drive forward the use of securitisation to deliver significant local benefits and benefits to the global economy which Hong Kong has the potential to do, beyond just infrastructure and SMEs. This is a great opportunity and one that we should all grasp with both hands as the best of times for Hong Kong are awaiting!

Susie Cheung

Co-Convenor

Asia-Pacific Structured Finance Association

"The sale of individual loans directly to investors is possible but difficult in practice because each infrastructure project is different and the terms of each loan may be different. Investors would prefer a simpler and easier way of investing in infrastructure loans. This problem is in many way similar to the difficulties in investing in housing loans. The solution is the securitisation of a basket of infrastructure loans."

– Norman Chan, GBS, JP, Former Chief Executive of the Hong Kong Monetary Authority

1. Funding Gaps

US$881 billion is spent by Asia's developing countries each year on infrastructure…

…this is well below their estimated needs of **US$1.8 trillion per year** through to 2030…

…which takes into account the cost of social infrastructure, such as schools and hospitals, leaving a funding gap of approximately **US$1 trillion per year**

Source: ADB

SMEs account for 95% of registered firms worldwide, and **50% of jobs**…

…but in Asia-Pacific, they suffer from a funding gap of **US$3.1 trillion**

Source: World Bank

2. Global Institutional Investors

Globally, **US$120 trillion** of assets under management

Banks **US$40 trillion**, Investment Companies **US$29 trillion**, Insurance Companies and Private Pensions **US$26 trillion**, Public Pensions / Superannuation Funds **US$11 trillion**, Others **US$14 trillion**

Source: McKinsey

Approximately only **3%** of institutional investment capital trickles through to infrastructure

Source: UBS

A record **US$17 trillion** of institutional investment currently carries a negative yield

Source: Bloomberg

OECD countries struggle as the growing savings of their aging populations are unable to find adequate investment opportunities

3. A Securitisation Hub in Hong Kong

Up to **US$120 billion** of capital markets funding for the Greater Bay Area…

…up to **US$28 billion** of additional capital markets funding for Hong Kong

In the US and the EU, funding from public securitisations stands at approximately 7.8% of GDP

Source: World Bank, SIFMA, AFME

An additional **1% GDP growth** per year

In the 4 years which followed the bottom of the GFC in 2009, the GDP of the US (which has a market-based economy and pushed an aggressive securitisation growth policy) grew by approximately 1% per year faster than the EU (which has a bank-based economy and, at the time, did not significantly use securitisation)

Source: IMF, AFME

Create a primary market for BRI and GBA securitisations with robust credit enhancement features

Supply the market by **originating**, alongside local commercial banks, **project loans and SME loans**

Securitisation is a **compelling policy response** to economic headwinds which threaten foreign direct investment and growth. It can attract new capital markets investment, support GDP growth and create jobs

Establish a **knowledge base** setting out best practices, eligibility criteria and standardised documentation, along with a history of successful transactions

Intermediate with Mainland authorities to provide **innovative FX solutions** and open **two-way funding channels**

An additional **2,500 jobs** in the financial services sector in Hong Kong…

…adding **US$500 million** of value to Hong Kong's economy

The Irish securitisation industry employs more than 2,500 professionals in delivering its international securitisation framework. In Hong Kong, each person employed in the financial services sector adds HK$1.7 million of value to the economy

Source: IDSA, CSD HKSAR

4. Government Support

provide **guarantees** to an individual loan or a junior portion of a pool of BRI loans

build **technical infrastructure** to ensure there is a sound platform on which data can be exchanged in relation to SME and project loan payments and underwriting criteria

generate **leverage** by buying the junior tranches in securitisations and establish **investment credit** to encourage banks to indirectly lend to targeted sectors such as SMEs

provide a **direct supply of funding** through acquiring BRI and GBA loans from banks for them to free up their regulatory capital

5. Regulatory and Agency Support

open up **two-way funding channels** to connect Mainland China and Hong Kong markets with Northbound trading in the Exchange Market and a pilot programme for Southbound trading under Bond Connect

help originators achieve off-balance sheet **accounting treatment** by guaranteeing or buying junior securitisation tranches

clarify **exchange control rules** for BRI and GBA-related securitisations by identifying which transaction parties must comply with the requirements and the process for doing so

reassess the investment grade rating requirement for QDI

gather data to formulate **balanced regulations** to ensure the regulatory capital cost – the risk weightings – applied to investments appropriately reflects the risks involved

develop **economic trading partnerships** with BRI countries to promote currency intermediation or other bilateral programmes to help mitigate the **foreign exchange** risk exposures to international investors

update Hong Kong's **legal framework** to provide additional legal certainty for special purpose vehicles and cross-border transactions

provide **withholding tax relief** to qualifying GBA securitisations

undertaking regular **government issuances** of BRI and GBA loans and other financial assets to create a ready supply and promote an active secondary market

A Securitisation Hub in Hong Kong

Headwinds from the ongoing trade war pose an economic challenge to Hong Kong and Mainland China; reducing foreign direct investment which has for decades powered the region's spectacular economic growth. Growth and investment are incredibly important to infrastructure and small and medium enterprises (SMEs). The way government policy responds to this economic challenge will have a significant effect on these sectors. Take, for instance, the Belt and Road Initiative (BRI) and the Guangdong-Hong Kong-Macao Greater Bay Area (GBA) development plan which emphasise the importance of infrastructure and SMEs as part of local, regional and global economies.

Halfway around the world, developed economies face a different challenge: unprecedented savings and a lack of investment opportunities for an estimated US$120 trillion of institutional capital.[1] A record portion of this pool of capital, US$17 trillion,[2] has negative yield: investors accept a certain loss if they hold the debt to maturity. This trend appears to be accelerating: in August 2019 alone, an additional US$3 trillion of debt securities' yields turned negative.[3]

These challenges provide a historic opportunity for Hong Kong. By leveraging a modest amount of public financial resources and fine-tuning its regulatory and tax system, Hong Kong can use its unique position, as a leading hub of international finance, to open new securitisation markets to provide attractive investment opportunities in infrastructure and SMEs to global institutional investors.

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[1] *Bridging Global Infrastructure Funding Gaps*, McKinsey, June 2016 (McKinsey (June 2016)). Available here

[2] Bloomberg, 31 August 2019

[3] Financial Times, 30 August 2019

Under the leadership of the Asia-Pacific Structured Finance Association (APSA), a working group with members representing banking, asset management, legal, engineering and other professional services has written this Report. It offers a policy roadmap for examining the challenges, studying the experiences from other countries and governments and making recommendations for policy makers in Hong Kong and Mainland China. The central goal is to leverage government resources to revitalise a securitisation market, and vault Hong Kong to the forefront of what is envisaged as an investment movement connecting excess savings in the West to under-investment in Asia and beyond.

Securitisation, aided by government policy and support, lies at the core of this Report's recommendations. Securitisation techniques have been successfully used by governments around the world to pool illiquid and local assets into standardised, diversified and liquid ones appealing to global institutional investors. And, in using securitisation, governments have been able to drive forward their policy agendas.

In choosing to focus on securitisation, governments can deploy their resources efficiently to achieve their desired outcomes. What is more, governments can wind down their support when the private sector becomes more involved and the securitisation markets mature to provide scale and liquidity.

This Report has three parts. It begins by outlining the securitisation tools which are available and giving examples of how they have been used elsewhere in relation to infrastructure and SMEs. It then considers the criteria which would regulate access to a securitisation platform in Hong Kong before outlining the support and incentives which could help build and grow deep and diverse securitisation markets.

The Executive Summary contains policy recommendations based on the rest of this Report.

Chapter 1
Executive Summary

Recommendations

1.1 The recommendations put forward in this Report vary in scope, resource-intensity, and ease of implementation. Some recommendations may require a small step, such as using government grants to encourage first-time issuers to test the securitisation market; others may involve a bigger step, such as governments establishing guarantee funds to support SMEs. The recommendations are also multifaceted: for instance, there are many incentives which may be provided by regulators and governments – including opening new funding channels, introducing balanced regulation and providing investment credit to banks which invest in supported securitisation sectors.

1.2 The authors of this Report believe now is an opportune time to focus on the revival of Hong Kong's securitisation market, given the increased growth of Mainland China's securitisation market and the increased interest from international institutional investors. An active securitisation market in Hong Kong, together with two-way capital flows in and out of Mainland China's securitisation market,[4] will enhance Hong Kong's position as a global financial centre and offshore RMB hub, bringing additional economic and job growth to the city and benefitting consumers and businesses, both small and large.

1.3 To take advantage of this opportunity, Hong Kong should establish itself as an international securitisation hub. This securitisation hub would have three core elements:

the hub would require **data and information** about prior successful transactions be made available to anyone who wishes to undertake a securitisation, including precedents, templates and guidance – showing how securitisation can be done
the hub must provide a **marketplace for professionals**, allowing anyone who wishes to undertake a securitisation access to the bankers, lawyers, accountants and other service providers they will need to execute it – showing who can help securitisation get done
the hub must have **robust laws, regulations, tax rules and market infrastructure** (such as stock exchanges and clearing systems) – allowing securitisations to be set-up and operate as efficiently as possible

[4] Within Asia, Mainland China has the largest public securitisation market (globally second only to the U.S.) with total outstandings of securitisation issuances at 2.7 trillion yuan (US$391 billion, using Yuan to US$ exchange rate of 6.9049 as of 24 May 2019) at the end of 2018. *Securitization continues to grow as a funding source for China's economy*, Moody's, 26 March 2019. Click here

1.4 To elevate this securitisation hub, the Hong Kong and Mainland governments could outline a range of government support initiatives. To access this government support, a securitisation would need to meet publicised criteria and, where applicable, make use of standardised documentation. To effectively examine and, where appropriate, implement the initiatives recommended in this Report, Hong Kong should empower a securitisation agency either by identifying an existing government bureau or establishing a new one.

1.5 This entity should advocate securitisation and take on the role of liaison among securitisation market participants and various government entities, addressing the effectiveness of these government policies and the scope of government support. Such an entity could also co-ordinate financial support from the Hong Kong and Mainland governments and simplify two-way capital flows between Hong Kong and the Mainland. Deeper cooperation could come in the form of a **GBA Development and Clearing Bank** taking on this role. Such a GBA Development and Clearing Bank could be jointly capitalised by the local GBA governments, deploying shared financial resources where appropriate, originating project loans and SME loans, providing guarantees, administering investment credit and providing credit enhancement to securitisations. It could seek an annual foreign currency and exchange quota from the State Administration of Foreign Exchange (SAFE) to use across the securitisations it supports, regulating the capital account for two-way capital flows within pre-approved limits.

1.6 There is great promise for Hong Kong to lead the charge in driving economic growth and creating jobs while realising the potential of the ambitious objectives of supporting investment in infrastructure and SMEs by using securitisation.

Important Policy Initiatives Can Benefit from Securitisation

1.7 Governments in Hong Kong and Mainland China have established important policy initiatives with the long-term objectives of sustainable economic growth and social development. Globally, economic development is also increasingly viewed with a need to balance the impact of human activity on the environment. These initiatives, and this balance, have challenging funding needs and could benefit from significant investment by global institutional investors through a vibrant securitisation marketplace in Hong Kong.

1.8 These include the **BRI**, first launched in 2013, which is gaining international traction, with more than 150 countries (including Italy, the first G7 country to join the project) and international organisations having signed agreements on Belt and Road cooperation with China as at April 2018.[5] Another, the **GBA** is a plan to upgrade the economy of the Pearl River Delta region, which had a population of around 70 million people at the end of 2017 and a total area of 56,000 km^2, with hi-tech and innovative manufacturing and services. Further, with the environment at its heart, the **Paris Agreement** is an agreement within the United Nations Framework Convention on Climate Change (UNFCCC),

[5] China Daily, 28 April 2019. Click here

dealing with greenhouse-gas-emissions mitigation, adaptation, and finance, signed in 2016.

Funding Gaps

1.9 Within Asia-Pacific, the traditional sources of funding for infrastructure and SMEs, predominantly sovereign and local governments and commercial banks, are fatigued. Governments face fiscal constraints and banks are facing more stringent capital requirements that make lending to these sectors less attractive. This has created a persistent funding gap.

1.10 **Infrastructure**: According to a 2017 study by the Asian Development Bank (ADB),[6] Asia continues to suffer from a massive infrastructure financing deficit which, taking into account “social” infrastructure such as health and education, is nearly US$1 trillion per year.

1.11 **SMEs**: The United Nations estimates the funding gap for SMEs in Asia-Pacific as US$3.1 trillion.[7]

1.12 These funding gaps provide an opportunity for international institutional investors to step in through securitisation.

Securitisation

1.13 A huge volume of funding is available in the capital markets. The global amount of assets under management has been estimated to stand at US$120 trillion.[8] In 2018 alone, new issuances in Asia reached more than US$2.7 trillion.[9] It is clear that there is plenty of institutional capital available for investment in the capital markets.

1.14 The potential for securitisation to connect the capital markets to borrowers and to deliver capital markets funding to infrastructure and SMEs is well known.

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[6] Sungsup Ra and Zhigang Li, *Closing The Financing Gap In Asian Infrastructure*, ADB South Asia Working Paper Series, NO. 57, June 2018 (ADB (June 2018))

[7] *Financing for development in Asia and the Pacific*, United Nations ESCAP, 2018 (UNESCAP (2018))

[8] See McKinsey (June 2016). *Recent Developments in European Capital Markets: Key Findings from the 2018 ECMI Statistical Package* (European Capital Markets Institute, 2018) put the figure at outstanding debt securities at US$94.5 trillion at the end of 2017

[9] ASIFMA’s Asia credit Report, Furth Quarter 2018 – Asia (G3 Currencies): US$569.7 billion; Asia (Local Currencies): US$2.2 trillion

1.15 Recent examples of **infrastructure** securitisations include:

RIN,[10] in the United States (U.S.), a project finance loan securitisation,[11] where bank originated project loans were refinanced in the capital markets
Bayfront Infrastructure Capital,[12] in Singapore, a project finance loan securitisation, where bank originated project loans were refinanced in the capital markets
Heathrow Funding,[13] in the United Kingdom, is a structured secured debt platform through which capital markets investors provide funding directly to Heathrow Airport

1.16 SME securitisations give **SMEs** access to the capital markets, which they would not have otherwise. In Europe, there was €77.8 billion (US$87.1 billion[14]) of outstanding SME securitisations at the end of Q3 2018.[15]

Government Support

1.17 There are many tools which have been used by governments to encourage and foster the growth of securitisation. The governments of Mainland China and Hong Kong could employ these in relation to infrastructure and SME securitisation. These tools include providing direct funding, providing guarantees, generating leverage, establishing investment credit and building technical infrastructure.

1.18 **Direct supply of funding**: Directly acquiring infrastructure and SME-related loans from banks will provide funding for those banks and free up regulatory capital for those banks to originate further loans. These acquisitions could also generate stocks of assets to use in government securitisations and, even though it may come at an initial cost, would help a steady flow of financial assets begin to build up.

1.19 **Guarantees**: Guarantees could be offered by the governments of Mainland China and Hong Kong and other regional governments in two main forms – first, directly guaranteeing all of an individual loan or a portion of an individual loan;

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[10] See the Cayman Islands Stock Exchange announcement here at www.csx.ky

[11] Loan securitisations, often referred to as collateralised loan obligations (CLOs), are discussed in more detail in Chapter 11 (*Targeted Government Support*)

[12] See the Singapore Stock Exchange announcement here at www.sgx.com

[13] Details available here at www.heathrow.com

[14] €to US$ exchange rate of 1.1198 as of 24 May 2019

[15] See AFME's 2019 Q1 securitisation data report. Available here at www.afme.eu

second, by guaranteeing a junior portion of a pool of loans. These options could operate to generate both supply and demand for securitisation. First, with respect to supply, guarantees will encourage banks to originate loans as the banks will be exposed to less risk of loss in the case of default. Second, with respect to demand, investors will be less exposed to the risk of loss given the government guarantee and would therefore be more willing to make an investment or make a larger investment or demand a lower return. In addition to direct guarantees of infrastructure loans and finance for the SME sector, guarantee programmes like the U.S. Small Business Administration (SBA) programme for SMEs could be established that are aimed at increasing secondary market liquidity of loan portfolios and securitisations.

1.20 **Leverage**: By buying the junior tranches in securitisations, governments could also generate leverage. By buying only the most junior position in a securitisation transaction it may attract other investors to invest on a senior basis – investors with fresh capital who would not otherwise be investing their money.[16]

1.21 Direct government support, whether in the form of direct funding, guarantees or buying junior tranches in securitisations could be complemented by blended finance with philanthropic funders, who seek to invest in a manner bringing about a specific social or environmental consequence. Private, and government, capital could earn market-rates whilst philanthropic funders would provide concessions, while achieving their desired social or environmental objectives.[17]

1.22 **Investment Credit**: An investment credit scheme could be established and provided to investors who participate in direct origination of infrastructure and SME loans, or who hold positions in infrastructure and SME securitisations. On the one hand, this will provide an incentive for banks which do not have the requisite skillset to originate these loans themselves to provide funding for infrastructure and SMEs through buying securitisations while at the same time incentivising the banks that do have that skillset to originate more.

1.23 **Technical infrastructure**: Governments should ensure there is a sound platform on which data can be exchanged in relation to SME and project loan payments and underwriting criteria. This will promote transparency and, over time, will enable a broad pool of historical data and information to accumulate for investor, and regulator, consideration.

Regulatory and Agency Support

1.24 Regulators and government authorities of Mainland China and Hong Kong can take some important steps to promote the use of securitisation for infrastructure and SMEs and create a world-leading, competitive securitisation destination. These steps could involve opening up funding channels, clarifying exchange control requirements, creating a balanced regulatory environment for

[16] See here at www.eif.org for an example of the European Investment Fund using leverage to facilitate SME finance

[17] The Organisation for Economic Co-operation and Development (OECD) promotes this ambitious use of funds. See here at www.oecd.org

securitisation investments, undertaking securitisation of government assets, permitting qualifying securitisation to be used in funding schemes, helping originators achieve off-balance sheet treatment, providing tax relief and updating aspects of Hong Kong's legal framework.

1.25 **Funding Channels**: Investors in Hong Kong and overseas could be permitted to invest in the Exchange Market in Mainland China via Bond Connect, allowing international institutional capital access to domestic infrastructure and SME-related securitisation transactions. Equally, institutional investors in Mainland China could be permitted to invest in infrastructure and SME securitisations issued in Hong Kong – a pilot programme for Southbound Trading under Bond Connect could be established or a dedicated pilot quota could be set under the Qualified Domestic Institutional Investor scheme.

1.26 **Exchange Control**: The National Development and Reform Commission (NDRC) and/or the SAFE could issue special guidance identifying which infrastructure and SME-related securitisations should be subject to existing requirements for foreign debt, which of the entities in the securitisations are subject to those requirements (for example, originators, special purpose vehicles or others), which entities are responsible for complying with the requirements and any procedures to be followed to ensure compliance by those entities.

1.27 **A balanced regulatory environment**: A number of rules and regulations in Hong Kong are linked to international credit rating agency ratings. These will cause difficulties for securitisations in jurisdictions which have non-investment grade sovereign ratings, or which have ratings provided only by local credit rating agencies, which will include many infrastructure and SME securitisations. One example of such a regulation is the Hong Kong qualifying debt instrument regime which provides an interest income and trading profits tax benefit to investors but only if the investment has an investment grade rating from a very short list of international credit rating agencies. This regime is intended to enhance Hong Kong’s competitiveness as an international financial centre but would, as currently structured, entirely exclude many infrastructure and SME securitisations.

1.28 Removing the investment grade rating requirement or expanding the list of recognised credit rating agencies would make infrastructure and SME securitisation eligible for these regimes, further promoting Hong Kong’s competitiveness as a global financial centre. Another example is the Mandatory Provident Fund Schemes Authority’s Guidelines on Debt Securities which have the same rating requirement. This could be amended in the same manner subject to a concentration limit for non-investment grade ratings. Ratings for securitisation should be encouraged, but not required. However, where credit ratings are being provided, credit assessments from at least two credit rating agencies should be issued to ensure investors are provided with different perspectives on the risks being assessed.

1.29 Balanced regulation must also ensure the regulatory capital cost – the risk weightings – applied to investments appropriately reflects the risks involved. More readily available historical data will help calibrate suitable risk weightings and address investors' concerns of the type mentioned in Chapters 6 (*Identifying Investment Thresholds*) and 10 (*Supporting Institutional Investors*).

1.30 **Government securitisations**: Regular issuances of infrastructure and SME securitisations will be needed to provide institutional investors with confidence that there is a ready supply and secondary market liquidity. The Mainland and Hong Kong governments (through appropriate agencies or authorities) should become regular securitisation issuers, packaging together infrastructure and SME loans and other financial assets which they have originated or acquired.

1.31 **Qualifying collateral**: Public sector entities (for example, the Hong Kong Monetary Authority (HKMA) or the Hong Kong Mortgage Corporation (HKMC)) could accept certain securitised instruments originated by Hong Kong entities as permitted collateral in such public sector entity's provision of liquidity support to entities under their existing liquidity support regimes or programmes. Permitting infrastructure and SME securitisation investments to be used in central bank liquidity schemes could increase secondary market liquidity and allow institutions to raise funding against the infrastructure and SME securitisation investments they hold.

1.32 **Accounting treatment**: By providing guarantees or buying junior tranches of securitisations, the Mainland and Hong Kong governments and other regional governments can assist originators in meeting accounting requirements for off-balance sheet treatment, encouraging these originators to grow their lending businesses.

1.33 **Tax relief**: SME securitisation in Mainland China, for instance in the GBA, may be subject to withholding tax in Mainland China, which increases transaction costs for securitisations. Authorities in Mainland China should consider reducing or eliminating withholding tax in the case of SME securitisations in the GBA undertaken through Hong Kong. In Hong Kong, the Inland Revenue Department should consider making advance tax rulings relating to deductibility automatic for infrastructure and SME-related securitisation special purpose vehicles.

1.34 **Legal framework**: Hong Kong should consider introducing a securitisation special purpose vehicle (SPV) regime, similar to those found in Luxembourg, the United Kingdom and Ireland, to provide additional legal certainty for Hong Kong located securitisation SPVs. Updating Hong Kong's conflict of laws rules in respect of intangible assets like loans and receivables, bringing them in line with those in Mainland China and the European Union (EU) – assessing the governing law rather than the *lex situs* – should be given a high priority.

Embracing Forex

1.35 For infrastructure and SME securitisations that are issued in Hong Kong in RMB and/or which have underlying RMB assets, the benefit of the more competitive onshore CNY to US$ hedging rate is not available and instead the offshore CNH to US$ hedging rate must be used. This is a competitive disadvantage for Hong Kong as a financing hub for infrastructure and SME securitisations and the People's Bank of China (PBOC) and the HKMA could issue guidelines around how offshore investors and special purpose vehicles involved in in RMB-backed or RMB-denominated infrastructure and SME securitisations can use onshore CNY hedging rates to hedge their RMB exposures.

1.36 To remove the sovereign risk as well as transfer and convertibility risk from a pool of infrastructure or SME assets, such risks could be assumed by a strong counterparty in Hong Kong – for instance, a government agency or authority in Mainland China or Hong Kong or a commercial insurance provider.

1.37 The governments of Mainland China and Hong Kong could develop economic trading partnerships with other countries, for instance those involved in the BRI, to promote currency intermediation or other bilateral programmes to help mitigate the foreign currency risk exposures of international investors.

1.38 Hong Kong regulators could also work with the central banks of these countries to enter into bilateral swaps to enable liquidity for hedging.

Setting Criteria for Access

1.39 To be eligible to access government support and the benefits of Hong Kong's securitisation hub, infrastructure and SME securitisations should be required to meet some pre-set criteria. Chapter 8 (*Setting Criteria and Standardising Transactions*) outlines how criteria can help build a stable and robust securitisation market. Setting transparent criteria has been a hallmark of a number of successful securitisation projects, including the HKMC's residential mortgage securitisation platform,[18] the U.S.'s Fannie Mae and Freddie Mac securitisation programmes,[19] and the EU's Simple, Transparent and Standardised (STS) securitisation framework.[20] In the context of a securitisation hub in Hong Kong, criteria would need to have sufficient operational flexibility to accommodate the wide variety of transactions which will naturally arise in relation to infrastructure and SMEs.

1.40 Criteria for infrastructure must take into account a diverse variety of factors. These are explored in Chapter 9 (*An Enabled Eco-System in Project Delivery*), and require a sound development plan, an appropriate procurement process and transparent ongoing governance and management. Sustainability must be a high priority and the environmental impact must be taken into account.

1.41 Criteria for SME loans should take into account the history of the SME's business, the tenor and size of the loan and the purpose for which the loan can be used. The SME Financing Guarantee Scheme operated by the HKMC on behalf of the Hong Kong Government already has a set of criteria which can

[18] See an overview here at www.hkmc.com.hk

[19] See an overview here at fhfa.gov

[20] An overview of the framework is available here at www.esma.europa.eu

form the basis for eligibility in infrastructure and SME-related securitisation transactions.[21]

1.42 Origination criteria for project loans and SME loans should both take into account the Principles for Responsible Banking, launched by the United Nations Environmental Programme – Finance Initiative in September 2019. The principles provide a framework for a sustainable banking system,[22] and help banks demonstrate the positive contribution they make to society – a goal particularly important for Hong Kong as part of the GBA.

1.43 Standard documentation and disclosure requirements can also form an important part of building investor confidence, and should be an integral part of any set of criteria, reducing the cost of investment and facilitating investment decisions.

Technology

1.44 The adoption of technology should be front and centre in the development of Hong Kong as a securitisation hub for infrastructure and SMEs. In particular, it should be used to ensure data is accurate and available and that transactions are undertaken in as efficient a manner as possible. The application of technology in infrastructure and SME securitisations is considered further in Chapter 7 (*The Framework for a Securitisation Hub*) and, in the case of any infrastructure or SME securitisation, the parties involved should consider what technology can be applied to best meet their needs.

Building a Practical Dispute Resolution Forum

1.45 The Department of Justice in Hong Kong could assist securitisation market participants in understanding and using the Electronic Business-Related Arbitration and Mediation (eBRAM) online dispute resolution tool and work with market participants to develop a protocol to provide bespoke dispute avoidance and resolution rules for infrastructure and securitisation transactions. Chapter 14 (*Building a Practical Dispute Resolution Forum*) makes a number of suggestions in this respect.

[21] See the objectives of the existing scheme here at www.hkmc.com.hk

[22] More information on the Principles for Responsible Banking are available here at www.oecd.org

Chapter 2
Wider Benefits of Securitisation for Hong Kong

2.1 The most direct benefit of securitisation to the Hong Kong economy would be the creation of securitisation-related jobs. Securitisation is a multidisciplinary and cross-functional debt capital market product that requires specialised skills in banking, legal, accounting and information technology across the entire value chain from origination to trading to derivatives and much more. According to statistics published by the Irish Debt Securities Association (IDSA), domestic employment from the special purpose vehicle sector alone is responsible for creating **2,725 jobs**.[23] When the entire securitisation value chain is considered, and given Hong Kong's potential to command the lion's share of the regional securitisation issuance, listing, and trading, the direct securitisation-related jobs can be multiple times that of the Irish comparator (Irish share of the euro-zone securitisation SPV listing is approximately 27% of the euro-zone total[24]), possibly into the tens of thousands. This would be a meaningful driver of job growth to Hong Kong's financial services industry, which according to Hong Kong Trade Development Council (HKTDC) statistics, employs approximately 250,000 professionals as of 2016.[25]

2.2 However, the more important benefits from a policy perspective may lie in the indirect benefits of securitisation: the potential for securitisation to promote long-term economic growth and job creation to the wider Hong Kong and GBA economies. Statistics are hard to source but the potential is substantial, as demonstrated by the following case studies of securitisation's impact on the European and U.S. economies.

2.3 According to a recent report by the Association for Financial Markets in Europe,[26] the differences between EU and U.S. financing in the areas of SMEs, infrastructure and private placements are substantial and responsible for holding back EU's economic growth. The report estimates that Europe only has two-thirds the level of investable assets available in the U.S. The report finds that Europe is over-reliant on bank funding, and that Europe's capital markets are significantly underdeveloped compared to the U.S.

[23] The Irish Debt Securities Association publishes statistics here at idsa.ie

[24] See *Irish SPV Report, Q1-2019*, IDSA

[25] HKTDC statistics are available here at www.hktdc.com

[26] *Bridging the growth gap, Investor views on European and U.S. capital markets and how they drive investment and economic growth*, Association for Financial Markets in Europe, February 2015 (AFME (February 2015))

2.4 Europe has approximately €30 trillion (US$33.6 trillion[27]) of external funding, against approximately €49 trillion (US$54.9 trillion[28]) in the U.S.[29]

2.5 This same gap exists in the securitisation space. An International Monetary Fund (IMF) 2015 report,[30] pointed out that – despite the fact the EU economy is slightly larger than the economy of the U.S. – the outstanding stock of both securitisation and asset-backed securities products in the U.S. (including government-supported issuances) is five times larger than in Europe. Furthermore, within this considerably smaller European market, banks play a dominant investment role: pension and insurance funds comprise a fairly trivial share of demand for select classes of European securitisations, while in the U.S. it is the other way around.

Year: 2013	**Approximate Bank Ownership Share**	**Approximate Pension and Insurance Ownership Share**
U.S. Consumer ABS	12%	17%
U.S. CMBS	15%	36%
EU Auto ABS	42%	2%
Dutch RMBS	39%	4%

2.6 This gap is in part responsible for the growth gap since the global financial crisis of 2008 (GFC) between the economies of the U.S. and the EU. According to the Association for Financial Markets: "*Europe's economy is highly dependent on banks for funding, much more so than other major economies such as the U.S. In the EU, the size of the banking sector relative to GDP is large; bank assets total approximately 300% of GDP. The U.S. bank sector is substantially smaller as a proportion of GDP than in Europe, with total bank assets just under*

[27] € to US$ exchange rate of 1.1198 as of 24 May 2019

[28] € to US$ exchange rate of 1.1198 as of 24 May 2019

[29] AFME (February 2015)

[30] *Securitisation: The Road Ahead*, IMF, January 2015. Available here

100% of GDP. This enables proportionately more borrowers more direct access to the capital markets than in Europe."[31]

2.7 The following table[32] shows the post-GFC growth gap. Some in the academic and policy circles believe that differences in policy responses, including those responsible for supporting the securitisation market, such as the Troubled Asset Relief Program (TARP) in the U.S., and the lack of comparable measures in the EU economies, are in part responsible for the growth gap in GDP shown in the table. Four years after the nadir of the GFC in 2009, U.S. GDP had cumulatively grown by 8.2 percentage points while EU GDP had cumulatively grown by only 3.7 percentage points – a gap of 4.5 percentage points over 4 years; **GDP** in the U.S. grew **approximately 1 more percentage point per year** than in the EU.

Year	U.S. GDP Growth (percentage points)	EU GDP Growth (percentage points)
2010	2.6	2.0
2011	1.6	1.8
2012	2.2	-0.4
2013	1.8	0.3
Cumulative	**8.2**	**3.7**

2.8 Interestingly, this post-GFC growth gap was predicted by an IMF research paper in 2011[33] which forecast that heavily market-based economies like the U.S. would see additional GDP growth of 2.7% over two years following an economic trough when compared to heavily bank-based economies, such as those in the European Union.

2.9 The 2013 AFME paper[34] also emphasised the positive effect of securitisation on GDP growth, "*The specific impact of renewed securitisation on growth has not been quantified, but could be significant in terms of GDP. If*

[31] *The Economic Benefits of High Quality Securitisation to the EU Economy*, Association for Financial Markets in Europe, November 2013 (AFME (November 2013))

[32] See the *Datamapper* for real GDP growth, available here on the IMF website at www.imf.org

[33] Julien Allard and Rodolphe Blavy, *Market Phoenixes and Banking Ducks*, IMF Working Paper WP/11/213. Available here

[34] AFME (November 2013)

securitisations provide funding which is incremental to banks' ability to place bank debt (in other words, is not a substitute for bank debt), and if the cash is used to support new lending (rather than refinancing), even a small net incremental increase in lending meeting these criteria would have positive impact on European GDP."

2.10 This sentiment is echoed in a recent report by the U.S. Treasury Department: "*The United States successfully derives a larger portion of business financing from its capital markets, rather than the banking system, than most other advanced economies. U.S. capital markets provide invaluable capital resources to our entrepreneurs and owners of businesses, whether they are large or small, public or private*". The report states that established securitisation markets "*support various lending channels, improving consumer access to credit cards, automobile loans, and a range of other credit products*". The U.S. Treasury report went on to conclude that "*policymakers and regulators should view this component of our capital markets as a by-product of, and safeguard to, America's global financial leadership*".[35]

2.11 In addition to GDP growth, securitisation can provide an additional source of funding for an economy. In terms of the comparative sizes of the securitisation markets in the EU and U.S. to their economies, at the end of 2018, total outstanding securitisations in the EU stood at €1,239 billion[36] (US$1,387 billion[37]) – approximately **7.8% of the EU's GDP** of €15,890 billion[38] (US$17,793 billion[39]). In the U.S., total outstanding securitisation (excluding government supported issuances) stood at US$1,615 billion[40] – approximately **7.9% of the U.S.'s GDP** of US$20,454 billion.[41] Hong Kong and the GBA should seek to achieve at least similar levels of funding, comparative to their GDPs, by promoting Hong Kong as an international securitisation hub.

2.12 The experience of the U.S. and European securitisation markets demonstrates the potential positive impact of securitisation for the Hong Kong and GBA economies, including its effects to enhance GDP growth as well as to improve access to and the availability of capital for funding businesses, hence leading to additional job creation in the overall economy. The creation of a vibrant securitisation market and its effect of expanding the capital markets could also lead to increased benefits for consumers and business, both small and large, as well as developers of infrastructure via improved access to credit.

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35 *A Financial System That Creates Economic Opportunities Capital Markets*, U.S. Department of the Treasury 2017 report to President Donald J. Trump

36 See AFME's 2018 Q4 securitisation data report

37 € to US$ exchange rate of 1.1198 as of 24 May 2019

38 Source: Eurostat

39 € to US$ exchange rate of 1.1198 as of 24 May 2019

40 Source: SIFMA

41 Source: World Bank

…the Hong Kong Mortgage Corporation Limited under HKMA is currently promoting securitisation of infrastructure loans… Such measeures will further channel capital in the private market… into mature infrastructure projects with effective operations and stable cash flows, giving full play to the function of financial services in supporting the real economy, and offering more options to investors…”

– Paul M.P. Chan, GBM, GBS, MH, JP

Securitisation in Context

…securitisation is an important element of well-functioning financial markets. Soundly structured securitisation is an important channel for diversifying funding sources and allocating risk more widely within the [EU] financial system. It allows for a broader distribution of financial-sector risk and can help free up originators' balance sheets to allow for further lending to the economy. Overall, it can improve efficiencies in the financial system and provide additional investment opportunities. Securitisation can create a bridge between credit institutions and capital markets with an indirect benefit for businesses and citizens (through, for example, less expensive loans and business financing, and credits for immovable property and credit cards)…[42]

[42] Recital (4), Regulation (EU) 2017/2042 of the European Parliament and of the Council

Chapter 3
Securitisation Tools

3.1 Securitisation is a collection of legal tools which can be applied to **cashflows**.

3.2 Examples of cashflows include payments under project loans, SME loans, trade receivables (eg, invoices owed by customers which remain unpaid), electricity bill payments, highway tolls alongside more traditional securitisation assets such as residential mortgages, auto-loans and credit cards. These cashflow are also often described as "financial assets".

3.3 The most important feature that all these examples share is that they represent an obligation of one person (for instance an individual or a company) to pay a specified amount of money on a specified day to another person. For instance, under a project loan, the project company is obliged to make payments of interest and principal to the lending banks on specified dates; under SME loans, SMEs are required to make payments of principal and interest to banks on specified dates; and with trade receivables, the buyer of goods is required to make a payment to the supplier of goods on a specified date.

3.4 All of these examples generate a cashflow – that is to say there is an expectation, and an obligation, that they will result in a payment of cash on a specified date. The person that owes the obligation to pay is typically called an "obligor" or "debtor". The person to which the obligation is owed, being the owner of the cashflow, is typically called the "originator".

3.5 There are three legal tools which are applied to these types of cashflow which are commonly referred to as "securitisation tools". These securitisation tools are pooling, isolation and channelling.

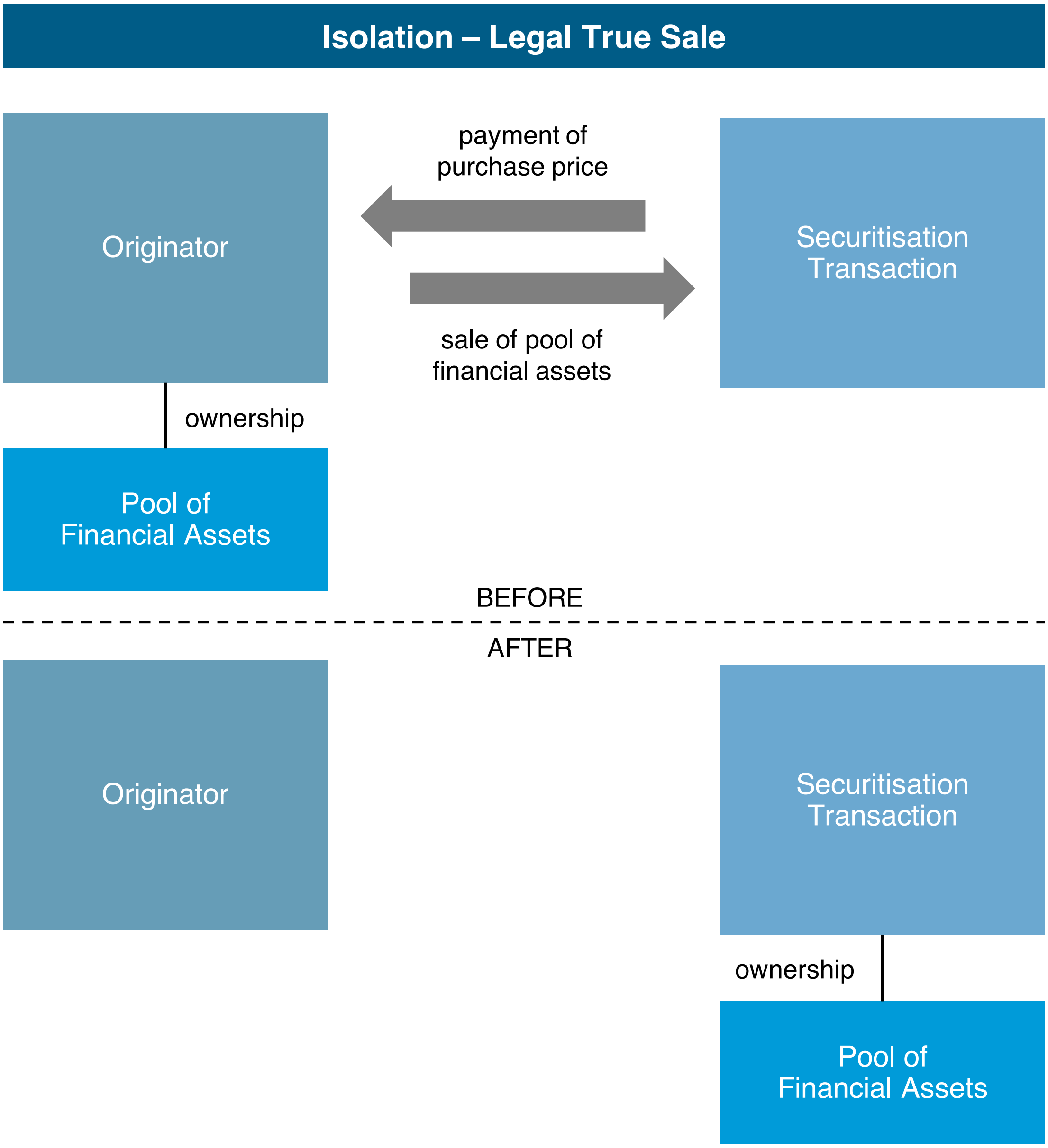
3.6 **Pooling** refers to the aggregation of multiple cashflows. Pooling cashflows diversifies the risk that the investor is exposed to. If the investor has exposure to a single project loan, then a default of that project may lead to a 100 per cent loss for that investor.

3.7 However, if the investor has exposure to a pool of 100 project loans, then a default on one project will have an effect on that investor's return, but perhaps only a small one. With financial assets like project loans, or SME loans, which may be perceived as high-risk investments, the ability to pool them, and give investors exposure to the pool as a whole rather than specific loans, results in an investor's risk being diversified.

3.8 **Isolation** is about making sure that the cashflow can make its way to a securitisation investor uninterrupted. The most significant matter which may typically interrupt that cash flowing is the insolvency of the originator – eg, in the case of a project loan, the insolvency of the bank which first lent the project loan, or in the case of a trade receivable, the corporate which supplied goods to its customer.

3.9 If the bank, or corporate, became insolvent, its insolvency official may try to argue that it is the originator who is entitled to the cashflow and not the securitisation investor. To fight such an argument, it is necessary to ensure there has been a "legal true sale" of the cashflow from the originator into the securitisation transaction.

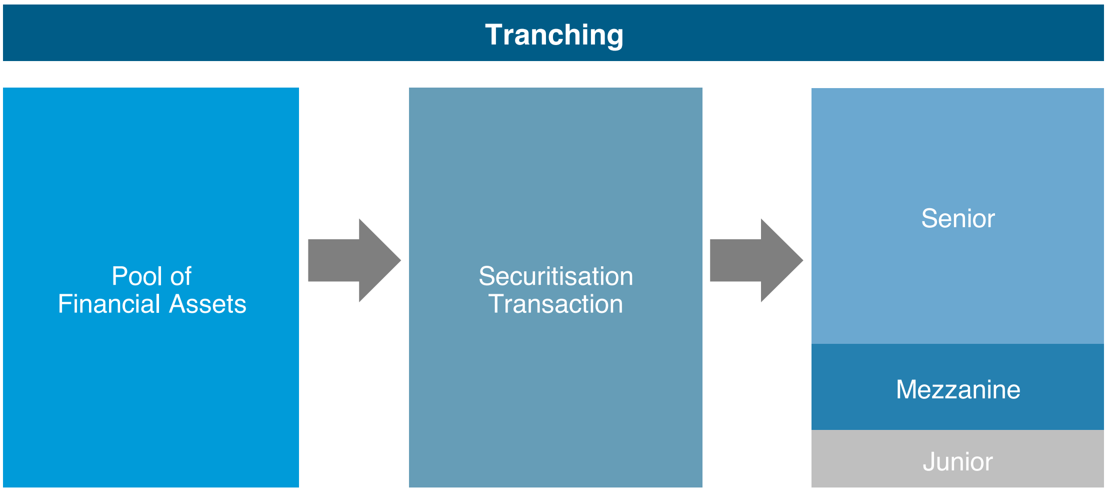
3.10 If the cashflow has truly been sold by the originator, then the originator's insolvency officials would have no claim to it. It is important to check the "legal true sale" nature of the transaction in each jurisdiction where the originator may be subject to insolvency proceedings as true sale rules differ from country to country.



3.11 **Channelling** relates to using the cash which is generated by a financial asset to repay an investment. The investment may be very simple and straightforward – eg, a pass-through where the cash received under a financial asset is passed through to pay interest and principal on a single securitisation note.

3.12 Investments may also be tranched. For instance, senior and junior securitisation notes could be issued, with the senior securitisation notes being entitled to the cashflows from the financial asset first, in priority to the junior securitisation notes. In this case, if some of the financial assets in the pool default it is the junior securitisation noteholders who would lose out first, because the performing assets are used to pay down the senior securitisation notes before any cash is made available to the junior securitisation notes – they could be said to hold the "first loss".

3.13 From the senior securitisation noteholders' perspective, such tranching also means that there is some tolerance for there to be losses in the pool without those losses affecting the payments to them. It is clear to see that the junior tranche in this instance is riskier, probably attracting a high return for the junior investor.



3.14 If a junior investor is willing to take that risk, however, it may attract a greater variety and volume of investors to invest in the senior securitisation notes, as the senior investors will not be exposed to the "first loss" risk which is being taken up by the junior investor – when done in this fashion, the junior securitisation tranches helps generate "leverage" as it brings in fresh senior investment from investors which would not otherwise have participated in the transaction.[43] Further mezzanine tranches can be added too, introducing layers of differing risk profiles and returns which investors can choose between.

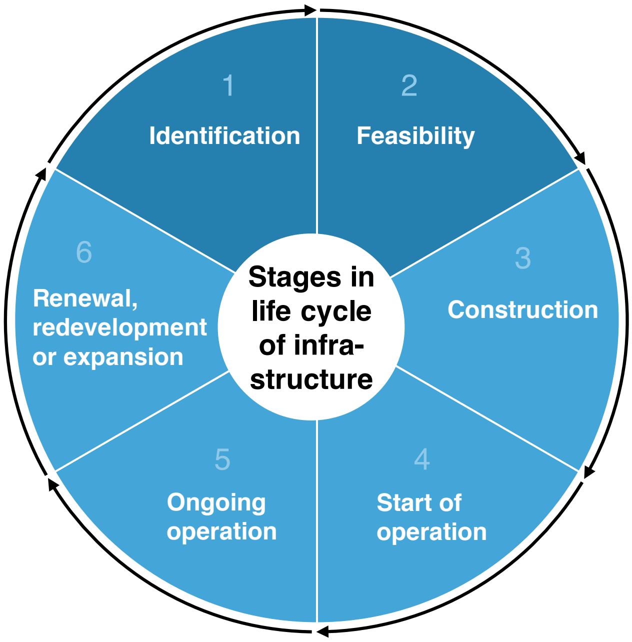
3.15 These three securitisation tools can be applied in a variety of ways to different cash-generating financial assets.

3.16 The following two Chapters consider examples of infrastructure and SMEs being included in securitisation transactions.

[43] Click here at www.eif.org for an example of the European Investment Fund using leverage to facilitate SME finance

Chapter 4
The Life Cycle of Infrastructure

4.1 Infrastructure has shifting funding requirements throughout its life. Securitisation can play a role in fulfilling these funding needs throughout that life cycle.



4.2 **Feasibility**: At the feasibility stage, securitisation should be taken into account to ensure that the project is put together in a manner which can fit in with a future securitisation.

4.3 **Construction**: As construction begins there will be a variety of suppliers (many of which will be SMEs) providing goods and services to the project and the project will owe trade receivables to those suppliers. These trade receivables could be used in a securitisation transaction. When the suppliers sell their receivables to the securitisation transaction, they will immediately receive cash in return, which will improve their working capital.

4.4 The SME suppliers, or the project itself, may also be leasing equipment to use in the construction and the rental payments under the lease could also be used in a securitisation transaction. The rental company would sell this flow of rental payments to the securitisation transaction, generating immediate cash for itself and improving its working capital. If this is done on a large scale the improvement in working capital may reduce its financing costs and it could share the benefit of that reduction with its customers.

4.5 **Start of operation**: Once construction has been completed, at the start of operations, the project will be generating cash which it will need to use to begin to repay the project loans which were advanced at the start of construction. At this stage the project loans are cash-generating (i.e., they have started generating a cashflow) and the banks that are receiving the cashflow could put those project loans into a securitisation.[44] When the banks sell the project loans to the securitisation transaction they will receive immediate cash and will free up capital, giving them greater financial resources to originate further project loans.

4.6 **Ongoing operation**: Once the infrastructure has had ongoing operations for a longer period it will be receiving a very stable cashflow from its users – perhaps fees from a toll bridge, electricity payments for a power station, port fees for a port company etc. These cashflows could be used as part of a "whole-business securitisation", also commonly called a "structured secured debt platform".[45]

4.7 In whole-business securitisations, funding is provided directly to the infrastructure to meet its varied funding requirements and can provide a more diversified source of funding to infrastructure, help to improve funding costs and provide a far more administratively streamlined reporting and covenant package. This in turn will benefit those who use the infrastructure – eg, consumers of electricity, drivers on toll roads or students in universities.

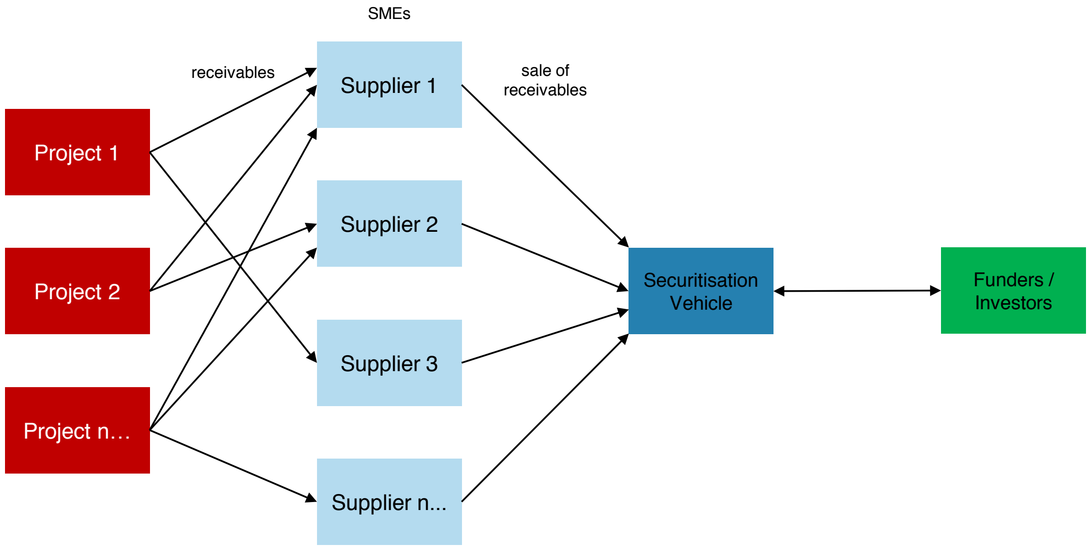
4.8 **Renewal, redevelopment and expansion**: As the infrastructure continues through its life, is renewed, redeveloped or expanded, the different cashflows and risks it is exposed to can also be funded as part of a whole-business securitisation. Such funding can incorporate features such as capital expenditure loans, hedging, revolving facilities and term funding.

[44] Examples mentioned above include RIN and Bayfront Infrastructure Capital

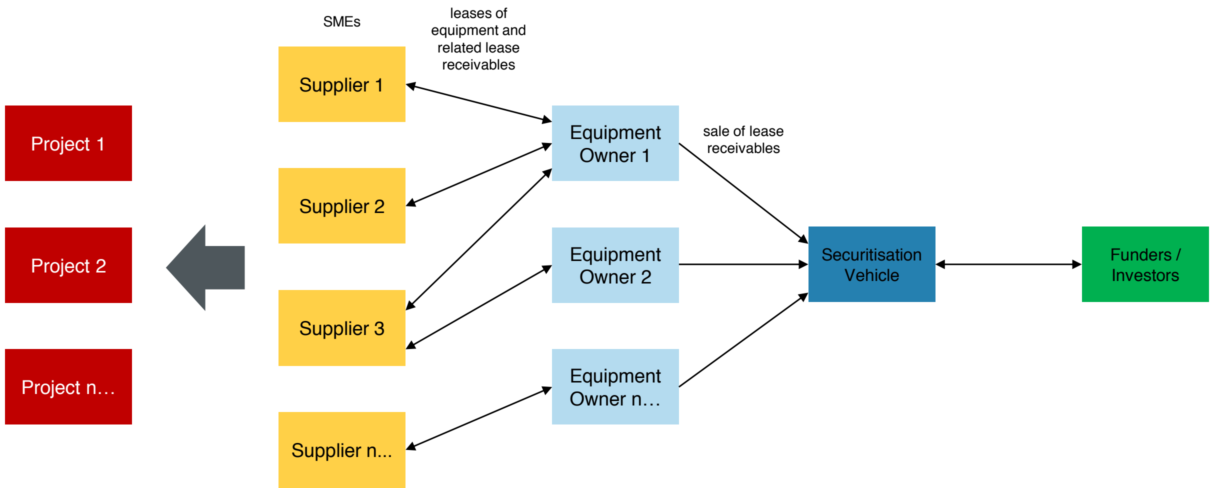
[45] Examples include (i) Heathrow Funding (details available here at www.heathrow.com) in the United Kingdom, a structured secured debt platform through which capital markets investors provide funding directly to Heathrow Airport, (ii) Hong Kong Link (details available here at www.legco.gov.hk) in Hong Kong, a structured secured debt platform through which capital markets investors directly financed the Hong Kong government-owned toll tunnels and bridges and (iii) Wales & West Utilities Finance (details available here at www.wwufinanceplc.co.uk) in the UK, a structured secured debt platform through which capital markets investors directly finance a regulated gas utility company

Typical securitisation structures

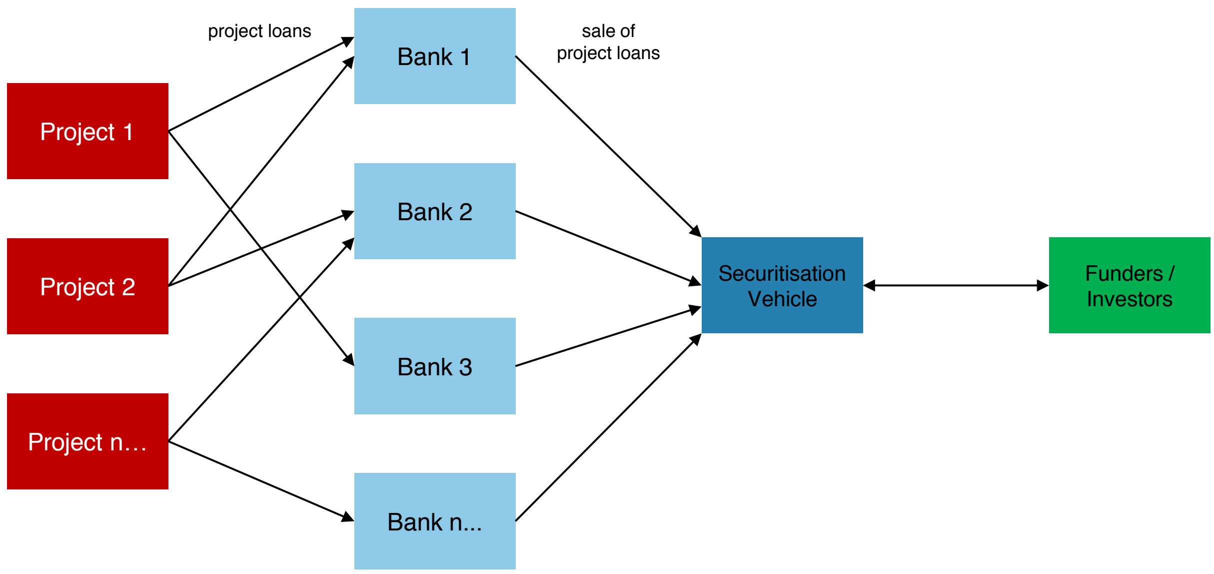
Trade receivables securitisation for SMEs
(Key benefit: generates working capital for SMEs)



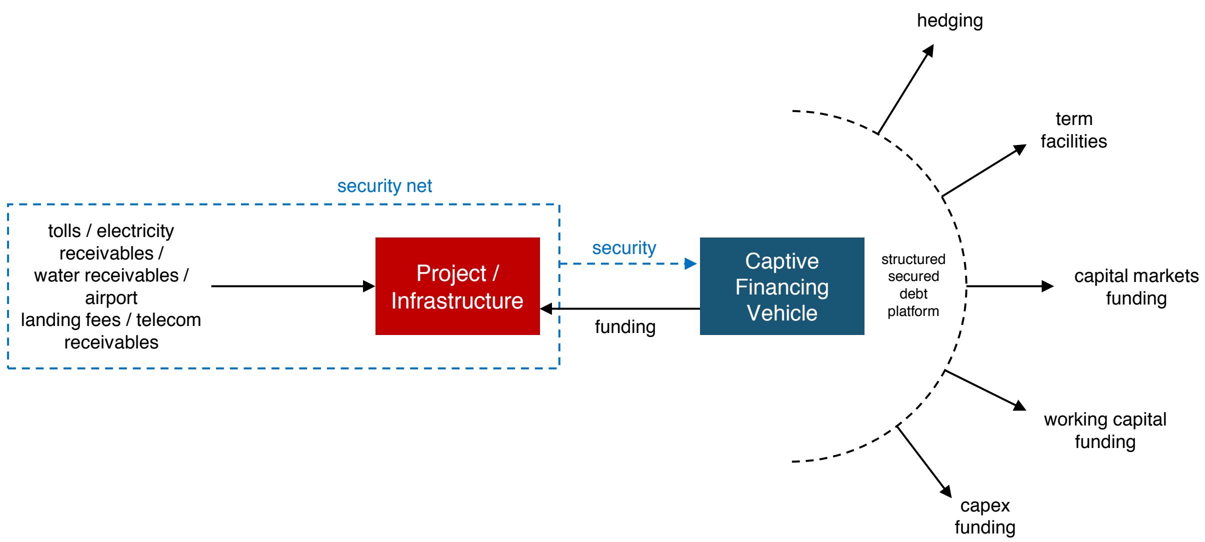
Equipment leasing securitisation for SMEs
(Key benefits: generates funding for equipment owners, creating cost efficiencies which can be passed on to the suppliers)



Infrastructure project loan securitisations (CLOs) for banks
(Key benefit: releases capital, and delivers cash, to permit banks to fund new loans)



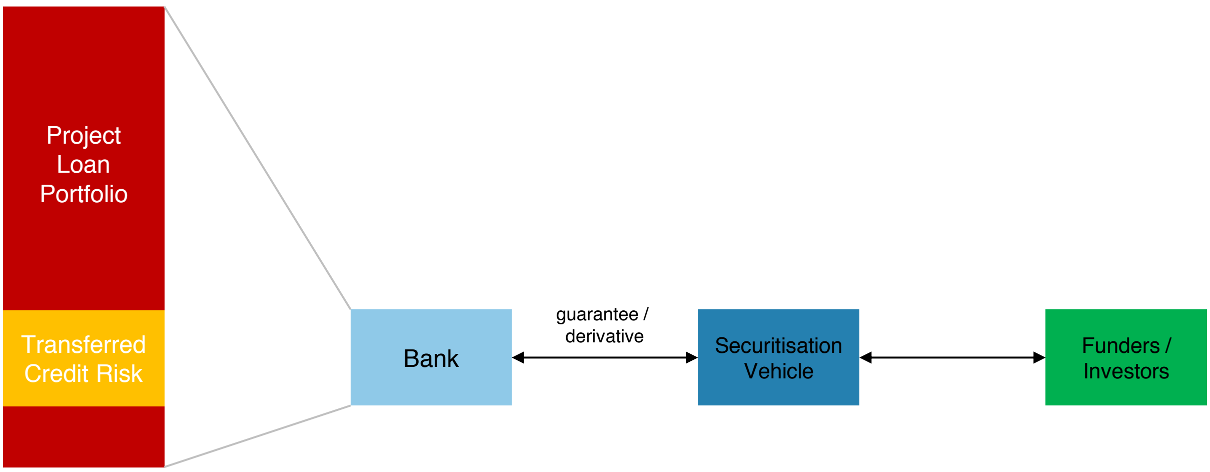
Whole business securitisation / structured secured debt platform
(Key benefits: improved funding costs, streamlined documentation and reporting, single covenant package and diversified funding)



4.9 Another securitisation technique which is available to banks in a number of jurisdictions (for instance, both Hong Kong[46] and Singapore[47]) is synthetic securitisation. These transactions involve the credit risk of portfolios of financial assets being passed to investors through qualifying (and typically funded) guarantees or derivatives. Once a bank has successfully transferred a significant amount of that credit risk, bank capital rules allow the bank to hold less capital against that portfolio, thereby freeing up more capital to undertake further lending activities. A synthetic securitisation has a different purpose to a traditional securitisation. It does not provide funding or liquidity to the originator; the primary purpose of a synthetic securitisation is the release of regulatory capital.

4.10 Synthetic securitisation has been done successfully in Europe with project finance loans.[48] As synthetic securitisations do not require the bank's ownership of the portfolio of financial assets to be transferred to an SPV, these transactions often provide a more flexible option to finance less homogenous pools of financial assets, including assets which may be subject to prohibitions on assignment, as is fairly common with project finance loans. Further, as such arrangements typically only involve a transfer of risk in a relatively small portion (albeit a junior portion) of the overall portfolio of financial assets, it is able to generate a significant capital benefit for the bank with a relatively small amount of capital from investors.

Synthetic securitisation
(Key benefits: capital relief for originating bank, freeing up capital to make new loans)



[46] See Part 7 of the Banking (Capital) Rules (Cap. 155L of Hong Kong)

[47] See Division 6 of Part VII of Monetary Authority of Singapore Notice 637, along with Annex 7AD

[48] See Santander's Renew Project Finance CLO 2017-1 securitisation, publicly rated by Scope Ratings and Arc Ratings, which included a pool of 241 infrastructure loans

Chapter 5
SME Finance

5.1 SMEs may raise money to run their businesses in a number of traditional ways, such as loans, trade receivables financing and other trade-related funding.

5.2 SME loans, which are made by a bank or other investors to the SME, are sometimes secured and/or supported by personal guarantees and sometimes unsecured and may take a variety of forms such as export and import loans, revolving credit facilities, inventory-backed facilities and, where the SME owns a property, mortgages.

5.3 Trade receivables financing allows SMEs to sell earned but uncollected income to a bank, a factor – a type of company that buys invoices at a discount – or an investor to raise working capital.

5.4 Other trade-related finance can include reimbursement obligations under letters of credit and payment obligations under promissory notes and bills of exchange. Finance may also be extended to SMEs in lease format, where the large upfront cost of expensive equipment or vehicles is avoided by an SME hiring that equipment or those vehicles to use in its business and making regular rent or hire payments over a number of years.

5.5 SMEs also benefit from the provision consumer credit. Take, for instance, loans advanced or credit extended to consumers to buy household goods such as fridges and cookers from local businesses, to buy cars from local dealerships, or to fund gym membership, insurance products, school fees or hospital bills – all operated or sold by SMEs. This consumer credit directly supports SMEs. Because of this link, securitisation of consumer credit, such as consumer loans and credit cards, will also support SMEs and should be seen as a core part of any use of securitisation to benefit SMEs.

5.6 While there are a variety of funding options, banks and other funders are often hesitant in extending credit to SMEs. The various reasons for this include SME loans having high origination costs with low revenue generation, and SMEs being high risk, or difficult to reach and often informally organised.[49]

5.7 While they struggle to raise finance, SMEs are often referred to as the backbone of the economy and are estimated to represent 95 per cent of registered firms worldwide and account for 50 per cent of jobs.[50]

5.8 Many governments have introduced measures to promote SME finance, including the Small Business Administration in the U.S. (see Chapter 11 (*Targeted Government Support*) for further details), Hong Kong's SME Loan

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[49] See *Alternative data transforming SME finance*, World Bank, May 2017

[50] See *What's happening in the middle*, World Bank 2017

Guarantee Scheme[51] and the European Investment Bank's and European Investment Fund's SME Initiatives in Bulgaria, Finland, Italy, Malta, Romania and Spain.[52]

5.9 Connecting SME finance with the capital markets, by including exposure to SMEs in securitisation transactions, has been recognised as a method of improving the flow of capital to SMEs in Europe, by the European Investment Fund[53] and the UK, by the British Business Bank.[54]

5.10 Many SMEs will be involved in infrastrucutre projects and, separately, one of the core aims of the GBA initiative is to help SMEs thrive. Infrastructure and SME securitisation transactions involving SMEs in the GBA can be used to give these SMEs access to a broader pool of capital and to give investors exposure to this dynamic asset class.

[51] Details of the scheme are available here at www.smefund.tid.gov.hk

[52] Details of the initiative are available here at www.eif.org

[53] *SME Securitisation – At a Crossroads*, EIF, 2015. Available here

[54] *Small and Medium Sized Enterprise Securitisation*, British Business Bank, 2015. Available here

Chapter 6
Identifying Investment Thresholds

6.1 In making investment decisions, particularly around asset classes such as infrastructure and SMEs, which may entail complex risks, there are a number of thresholds which investors often struggle to cross. These thresholds must be understood and addressed if Hong Kong is to successfully mobilise a deep pool of institutional capital for infrastructure and SME securitisation transactions.

6.2 Prudential regulatory treatment, and the limited availability of historical data, in relation to infrastructure is one of these. Risk weights[55] for institutions investing in infrastructure projects are unclear and sometimes more than unsecured corporate bonds,[56] even though most infrastructure financings include comprehensive security packages for investors.

6.3 While banks which are active in infrastructure financing can pool historical performance data to build up their internal models to justify applying lower risk weights to their infrastructure exposures, investors like insurance companies and pension funds usually do not have similar access to the historical default and recovery data, and therefore could only adopt general (more punitive) risk weighting models. There is also significant variability in the risk weights for securitisation exposures which apply to institutional investors, with U.S. and European regulators having different approaches with the lack of historical data making capital treatment fairly punitive, particularly compared to investments in other asset classes such as corporate debt.[57]

6.4 The absence of standardisation between different projects and different SME loans is a result of the historic bank domination of the infrastructure and SME markets. For capital markets investors, the lack of standardisation is an issue as they typically lack resource, time and expertise to review the diverse terms applying to projects and SMEs or participate in lengthy documentation negotiation.

6.5 Due diligence around the projects and SMEs has historically been the domain of banks. Investors in the capital markets often do not have access to the same level of due diligence. Sufficient disclosure of information on the underlying investments could help build investors' confidence. This could be enhanced

[55] Risk weights are used to calculate the amount of capital which an institution has to hold in respect of a particular investment

[56] For example, simply because private loans are not rated, many private loans to PPP projects in Australia are currently assigned a higher risk weight by the insurance regulator compared to unsecured investment grade corporate bonds, even though the revenue quality of PPP is generally highly predictable from AAA rated state government supported by a standard security package from the PPP vehicle

[57] For example, the EU regulation requires higher capital charges for CLOs than U.S. regulations. Additionally, EU regulation is more punitive toward CLOs compared to corporate bonds with the same rating

through the development of an open and transparent platform which allows for timely exchange of data in relation to securitisations.

6.6 Where rating agencies are involved, they typically do seek access to a deep level of information and the lack of external ratings to support investor due diligence for transactions may discourage investor participation. The absence of external ratings may also require high risk weightings to be applied if the investor does invest.

6.7 Limited standardisation and difficulty in undertaking due diligence increases transaction costs for institutional investors stressing their pricing models and eating into the return being offered by issuers. When the pricing offered in respect of project loans or SME loans is also taken into account, which is typically set by the original lending bank on the basis of the internal risk weighting models (which institutional investors are not able to use), the lack of yield puts off many institutional investors from participating or means institutional investor pricing is not competitive vis-à-vis the borrower continuing to fund itself in the bank market.

6.8 Most project and SME loans are advanced with a floating rate and short tenor which is not easily compatible with investment policies for insurance companies and pension funds which typically look to invest long-term for a fixed return.

6.9 Given the structure of their liabilities, institutional investors like insurance companies and pension funds have ample capacity to provide long term local currency funding. However, international banks active in the project financing sector tend to pursue and originate US$ financing opportunities as it suits the profile of their liabilities. Infrastructure opportunities in local currencies are limited and much less explored. These local currency projects tend to rely on public funding or funding from local banks.

6.10 A limited transaction flow, together with limited secondary market liquidity and a lack of historical data, for infrastructure and SME securitisations in Asia-Pacific, makes it difficult for institutional investors to assess the underlying risks, assess investments by comparing them to other similar ones or set an exit route in the event they need to sell their investment.

6.11 These thresholds for institutional investors must be kept in focus so that as the options for support considered in the following Chapters are implemented, they are implemented in a manner which will meet the requirements of investors.

“

…Hong Kong, with its world class project finance expertise, accounting and legal services, taxation and dispute resolution system, is in a good position to play the role of a securitisation hub. If successful, this will bring about huge benefits for many sectors such as banking, asset management, legal, egineering, and other professional services.”

– Eddie Yue, JP

Accessing the Securitisation Hub

> …criteria may help both investors and supervisors assess the risk of securitisation exposures by fostering simplicity in the underlying assets and the structures of securitisations meeting such criteria. By improving transparency … criteria may help provide investors throughout the life of the transaction with greater access to comprehensive and reliable information about the securitisation structure and their underlying assets' characteristics and performance. By incentivising a greater comparability for certain elements of securitisation transactions … criteria could lower investors' hurdle for assessing securitisation risks.[58]

[58] Basel Committee on Banking Supervision, Basel III Document, *Revisions to the securitisation framework*, 11 December 2014 (rev. July 2016)

Chapter 7
The Framework for a Securitisation Hub

7.1 If some of the initiatives in Chapters 10 to 14 are implemented in Hong Kong and Mainland China, the benefits available to users of a Hong Kong securitisation hub may be substantial. Having pre-set and clear criteria as threshold conditions to benefitting from this securitisation hub is a sound way to regulate access to the measures proposed in this Report.

7.2 Chapter 8 (*Setting Criteria and Standardising Transactions*) describes criteria used in other securitisation and funding regimes and how criteria, and in particular standardised documentation, can bring about more holistic efficiencies in securitisation transactions. But fixed criteria are exactly that – fixed – and in a diverse market like infrastructure construction, where every project will be unique and every business relationship bespoke, it will not be possible to set out a rigid set of criteria which must be met in all circumstances. Flexibility is required – there will be no "one-size-fits-all" within the incredibly diverse world of infrastructure and SMEs. This is why, for instance, a set of best practices for projects will be more appropriate than hard and fast criteria for the construction stage of infrastructure. Suggestions for these best practices are set out in Chapter 9 (*An Enabled Eco-System in Project Delivery*).

7.3 The way, in practice, in which a securitisation hub is established must take two perspectives into account – on the one hand it must ensure it is used in meeting the identified policy objectives while, on the other hand, conferring the relevant benefits on only those doing it in an appropriate manner and form.

7.4 To be effective, a securitisation hub must bring together a variety of elements. Among these, three are key. The securitisation hub must be a repository for data and information, it must bring together market participants with securitisation service providers and it must include a platform with the necessary market infrastructure supported by a robust legal framework.

Data and Information

7.5 Unless market participants can see how to undertake a successful transaction and benefit from the securitisation hub they may be reluctant to take part. A securitisation hub will not be attractive if it is closed with market participants unable to see how to undertake and benefit from closing transactions. Open and accessible data about prior transactions, about eligibility criteria, about standard documentation and about investor and rating agency requirements is essential. There are many facets to this.

7.6 **Access**: For a securitisation hub to have scale it must be electronically accessible. A central repository of data and information can establish and regulate access to a vast searchable electronic database containing data and information which will be of use to potential users of the hub. Access should be available to all companies and institutions which have a genuine interest in making use of the hub. The database should also permit users to use application programming interfaces, so their systems can directly and electronically interact with the data and information on the platform, allowing that data and information to be used as efficiently as possible.

7.7 **Prior eligible transactions**: Details of prior transactions, which have made use of the hub, should be publicly available. If market participants can see how to construct an eligible transaction, the features it has and the fact it was successful in raising funding they will have a path they can follow for a transaction of their own.

7.8 The details which are included must be comprehensive and include the prospectus, offering memorandum or other disclosure material for a prior transaction or where there is no such document, a summary document including all material details of the transaction's structure and the way in which is complies with the eligibility requirements of the securitisation hub. For public transactions, ongoing performance data should also be made available. Allowances should be made for private transactions where only more generic data need be made available.

7.9 It will be the responsibility of the beneficiaries of the hub to contribute the necessary data and information and they must ensure it is accurate and reliable. The process of submitting documentation when a transaction closes, and on an ongoing basis throughout its life, would be automated, with the manager of the relevant securitisation submitting that data and information at the same time it is made available to investors.

7.10 **Criteria, best practices and templates**: Making criteria, best practices and industry templates available will be equally important, giving prospective originators, issuers and arrangers clear guidance on what will be needed for a transaction to be eligible for inclusion a securitisation hub. Again, technology can play an important role in helping make this information available to those that wish to access it. The *Infrastructure Tool Kit* for the Belt and Road Initiative, recently launched by the Hong Kong Trade Development Council,[59] is a good example of how best practices and guidance for the infrastructure industry can be made available in a clear and easily accessible digital format.

An Open Forum for Financial Professionals

7.11 Hong Kong is a world-leader in financial services and its financial professionals, whether they be bankers, consultants, accountants, lawyers or otherwise, are best placed to help lead potential users of the Hong Kong securitisation hub through its requirements. The securitisation hub should have an integrated forum for financial professionals to share ideas and thoughts and actively participate in the growth of the hub. They could contribute how-to-guides for particular types of securitisation, scholarly articles on structural features and share ideas and suggestions of how to build out the securitisation hub.

[59] Available here at beltandroad.hktdc.com

7.12 This part of the hub would be interactive – a discussion board and network, with appropriate individuals having the ability to contribute content which would be accessible by all who wish to make use of the platform.

Market Infrastructure

7.13 Without appropriate market infrastructure, securitisation would not be possible. Ensuring Hong Kong's market infrastructure is sufficiently tailored to securitisation transactions is essential. There are many elements of infrastructure which are required – stock exchanges, clearing systems, trustees, transactional banking and payment services, among others.

7.14 Stock exchanges must adequately contemplate the structure of securitisation transactions. The Stock Exchange of Hong Kong, for instance, has listing rules designed to accommodate asset-backed securities, but these are seldom used and generally cater only for securitisation with loans as the underlying asset.[60] Infrastructure and SME securitisation may have a more diverse range of underlying assets. Once criteria and best practices in relation to infrastructure and SME securitisations have been set, listing rules could be updated to contemplate this wider range of transactions.

7.15 Clearing systems are essential to secondary market trading, allowing investors to buy-in to securitisations or trade their positions. Securitisation markets typically use Euroclear or Clearstream, Luxembourg outside of the U.S., but for infrastructure and SMEs securitisations in Hong Kong the Central Moneymarkets Unit (CMU) of the HKMA could seek to take a leading role in clearing transactions.

Legal Framework

7.16 The legal framework must also be appropriately synchronised with the policy objectives of securitisation. Hong Kong's common law tradition and rule of law gives Hong Kong's legal system a strong grounding for use in securitisation transactions. Many other countries with large securitisation markets have introduced domestic securitisation legislation – for instance Ireland, with its "Section 110" regime, and Luxembourg, with its "Securitisation Law".[61] These laws provide additional legal certainty to a range of legal elements in securitisation transactions, including regulatory treatment and the use of special purpose vehicles. Hong Kong could introduce similar securitisation laws, entrenching a securitisation framework within the fabric of its legal system.

7.17 Infrastructure and SME securitisation transactions will also have many cross-border elements. The conflict of law rules in Hong Kong, particularly in relation to intangible assets, such as loans and receivables, have not been updated for more than forty years and often require additional structuring techniques to be included over a nebulous legal concept of the *lex situs* – or the location – of the

[60] The Hong Kong Stock Exchange's rules are available here at www.hkex.com

[61] The United Kingdom also has rules relating to securitisation special purpose vehicles

loan or receivable in question. Given loans and receivables have no physical form, it is conceptually difficult to ascribe them a location. Other jurisdictions use other reference points in their conflict of laws rules. Hong Kong's conflict of law rules in relation to intangible assets could be updated and brought into line with those in Mainland China or, for instance, the EU-wide "Rome I" rules,[62] which look to the governing law of the intangible asset, rather than its illusory location. This would create additional execution certainty and help obviate the need for other unnecessary structural features.

Technology

7.18 The Hong Kong government is a strong proponent of the use of technology in facilitating finance and there are myriad ways in which technology could assist securitisation transactions as well as ways it may revolutionise it. Any policy measures which are adopted to facilitate infrastructure and SME securitisations should bear this in mind. As new technologies change the way in which payments are processed, information is distributed, intermediaries operate and/or value is represented, the key underlying objectives for a strong infrastructure and SME securitisation market should remain at the forefront of the minds of governments and regulators. Technology could be applied to different stages of the securitisation process to achieve better, smoother and more efficient securitisations with fewer risks.

7.19 Some technology has already been mentioned above, most notably in connection with making data and information in the securitisation hub available to interested parties. Cloud computing and storage will play a large part in this.

7.20 **Communication**: Communication between all participants in securitisation transactions is another area where technology could play a role. Securitisation transactions run on data, and efficient sharing of data with the parties that need it will make transactions run more smoothly. Some key data flows are, for instance, between the asset servicer and the transaction manager, who will then process the data and prepare reports for investors. The asset servicer's systems could be directly linked to the transaction manager whose systems could, in turn, be directly linked to the medium on which reports are made available to investors. When facing huge amounts of data in the securitisation origination and servicing process, the ability to access, process and maintain data and information will be key and must be capable of being tailored for every individual deal. Networking proprietary systems to an investor-facing website and recording direct communications can take time; if an integrated technology solution covering all these tasks can be developed on a single platform, true synergies could be realised.

7.21 Developed markets for securitisation, like the U.S., have examples such as the Securities and Exchange Commission rule 17g-5,[63] a regulatory requirement to

[62] Regulation (EC) 593/2008

[63] Rule 17g-5(a)(3) under the Securities Exchange Act established a program to provide information necessary to determine a structured finance product's credit rating to NRSROs that were not hired by the issuer, sponsor, or underwriter of the structured finance product (the SEC's press release is available here at www.sec.gov)

mitigate the inherent conflicts of interest created by hired ratings and to improve rating transparency. The key requirement of SEC rule 17g-5 is a password-protected "Rating in Process" website with all information for determining an initial rating and undertaking rating surveillance. Such websites provide instant updates and maintain information flows to comply with regulations. In building a securitisation platform for infrastructure and SME securitisations in Hong Kong, technological solutions like this website could be a potential solution.

7.22 With respect to infrastructure projects, communication during the constructions phase is incredibly important – keeping banks or investors up-to-date with progress. A data hub for each project could be established, accessible to all relevant parties, and on which site reports, status updates, surveys, photographs, satellite images and project plans could be included, and even made available for comment.

7.23 With respect to projects themselves, and the infrastructure being built, an internet-of-things (IoT) could bring banks and investors even closer to day-to-day operations. The IoT involves giving a physical object a connection to a network and the ability to send and receive data over that network. As data relating to myriad physical objects is shared, with other objects and centrally, this can be harvested and made available to interested parties. Take, for instance, an electricity grid being built. As each pylon is constructed it could be connected to a network – banks and investors would be able to see that particular pylon has come on-line and track the overall progress of the project. If, in the future, that pylon goes off-line, it could report itself to the central network and an engineer would be despatched to fix it. Once it has been fixed it would report to the central network that it is, again, operational.

7.24 **Blockchain**: Blockchain is another technology which could have significant application in securitisation transactions. A Structured Finance Industry Group report from 2017 outlined a number of these.[64] With respect to data and information, a significant benefit of using blockchain is immutability – giving certainty that data and information has not been tampered with and thereby giving it additional credibility. Securitisation is often referred to as being "self-certified" – in the sense that funding is provided based on data and information which the originator and/or issuer has prepared itself. Significant due diligence is often undertaken by accountants and other advisers at the outset of a transaction and then on an ongoing basis throughout the life of the transaction to ensure that the data actually reflects what is happening in reality to the underlying loans and receivables. If the underlying loans or receivables, and all the data in respect of them, was automatically included on a blockchain, this checking and auditing procedure could be done extremely quickly, perhaps even automatically. This could save significant time and cost.

7.25 Another feature of blockchain, or more specifically distributed ledger technology, is the electronic transfer of value. For instance, there are two important transfers of value involved in securitisation transactions – first, the transfer of loans or

[64] Deloitte's report is available here at www.deloitte.com

receivables into a securitisation structure and, second, the transfer of investments between investors.

7.26 The initial transfer of loans and receivables often involves a long legal document and ongoing transfers throughout the life of a transaction can involve cumbersome reports and manual processes. If the loans and receivables could be represented on a distributed ledger and transfers made electronically on that ledger, the time and effort taken to effect their transfer could be significantly reduced.

7.27 With respect to transfers of investments between investors, clearing systems already provide electronic trading services, however, all transactions still require input from an intermediary – the clearing system. A distributed ledger has no intermediary and a transaction will take place peer-to-peer, between the investor selling an investment and an investor buying an investment. This direct transfer of value will have an incremental benefit to the arrangement, both in terms of time and cost which, if considered in the context of an entire securitisation market, could be significant.

7.28 **Payment systems**: Another element of "value" in securitisation transactions is the cashflow itself – the payment from an underlying obligor, to a servicer, to the securitisation structure, possibly to a paying agent and ultimately to an investor. Each stage of this payment chain is subject to risks as the funds in questions pass through various accounts of various counterparties at various banks. These payments can also take time, sometimes several days, before reaching the investor at the end of the chain. If digital currencies become mainstream, allowing near-instantaneous transfer of currency, this could create huge operational efficiencies in the cash management operations of securitisation transactions.

7.29 Digital currencies aside, payment systems are an area of the wider banking system which are currently undergoing significant changes. In Hong Kong, recent introductions of contactless payment, the faster-payment-service and services like WeChat Pay are significantly changing the way people pay for goods and services. Hong Kong has also recently approved and licensed a number of virtual banks which will further change the way individuals and companies use financial services. These technologies allow payments and transfers to be made more swiftly, reducing risks. The fewer risks there are associated with cashflows, the fewer risks there will be associated with a securitisation of those cashflow.

7.30 **Automation**: Automation is another benefit technology may bring. Some roles within securitisations are purely administrative – eg, a note trustee is a conduit between the noteholders and the issuer, sharing information, passing on instructions and calling meetings. Meetings often take a number of months to hold, leading to significant timing lags for originators and issuers who wish to amend outstanding securitisations. As with any administrative task, such arrangements could, over time, be fully automated. An investor portal could be established for a securitisation transaction and all information required to be given to investors simply made available on that platform – no need for a third party to take steps to share that information with the investors. Similarly, with voting, investors could simply vote through the portal, providing quick feedback to requests, rather than making the originator or issuer wait many weeks for a response.

7.31 **Origination and credit assessments**: Technology can make loan origination against pre-set underwriting criteria become more predictable and transparent, for instance, in relation to SME loans, where applications screen verified data against underwriting criteria. Note, for instance, Bank of Communication's RMB 9.3 billion (US$1.3 billion) Jiaoying residential mortgage backed securitisation in September 2018 which moved the credit data of residential mortgages onto a distributed network to allow different parties involved in the securitisation issuance process to view the most up-to-date information about the mortgages and conduct due diligence.

7.32 Technology provides various opportunities for securitisation transactions. It should be a requirement of all infrastructure and SME securitisations that the participants give due consideration to the technology available to them and certify that they have made use of it where appropriate to reduce operational inefficiencies and cost in connection with their securitisations.

Chapter 8
Setting Criteria and Standardising Transactions

International examples

8.1 To be eligible to access regulatory or government support which would be available in a Hong Kong securitisation hub, infrastructure and SME securitisations should be required to meet pre-set criteria. Setting criteria for eligibility has been a hallmark of a number of securitisation initiatives.[65]

8.2 In the U.S., the Fannie Mae and Freddie Mac securitisation programmes set criteria which loans must meet in order to be eligible for inclusion. The programmes seek to provide liquidity, stability and affordability to the mortgage market in the U.S. and provide lenders with the comfort that the loans they originate can be purchased and provide investors with comfort that the loans they invest in are expected to meet the criteria.

8.3 Hong Kong also has criteria in place for residential mortgages,[66] which were established when the HKMC's Bauhinia securitisation programme was set up. The criteria introduced a framework for banks to sell eligible mortgages to the programme and standardised certain origination documents; the programme helped generate liquidity and freed up bank capital.

8.4 In the EU, the Simple, Transparent and Standardised (STS) securitisation rules, which apply across the EU's 28 member states, provide investors with benefits, such as lower risk weightings on STS investments and allowing STS investments to count as high-quality collateral for the Basel III liquidity coverage ratio and net stable funding ratio tests.[67] The STS rules include criteria for underlying assets, the securitisation structure and provide a detailed transparency framework to provide investors with information about the financial assets they are investing in.

Setting criteria

8.5 Setting criteria and standardising documentation for infrastructure and SME securitisation will help encourage a pipeline of transactions. Criteria will provide originators, such as banks, with confidence that if they originate eligible loans that there will be a market in which they will be able to transfer those loans in the future. If the use of eligible infrastructure and SME financial assets in securitisations provides capital, liquidity or other benefits to institutional investors this will increase demand for infrastructure and SME financial assets and, consequently, provide an incentive for originators to create them and

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[65] In addition to the examples listed in this Chapter, the Reserve Bank of India's Committee on the Development of Housing Finance Securitisation Market released a report in September 2019 citing standardisation of loan documentation, investor reporting and servicing processes as key requirements for a strong home loan securitisation market in India

[66] The HKMC's overview is available here at www.hkmc.com.hk

[67] Details of ESMA's securitisation policy activities are available here at www.esma.europa.eu

transfer those infrastructure and SME financial assets to the capital markets through securitisation transactions. When banks sell infrastructure and SME financial assets in this manner, they will receive cash and it will free up capital which will allow them to originate more financial assets.[68]

8.6 Standardisation will also help reduce the due diligence burden. If assets and documentation are standardised, due diligence checks will relate more to checking compliance against standard criteria and documentation rather than needing institutional investors to review painstakingly long non-standardised contracts and reports.

Standardisation

8.7 When criteria are set and standard documents are used, they should take into account some key objectives. They should provide a level playing field, with minimum standards, for all participants in securitisation transactions, helping investors analyse different projects more efficiently in the knowledge that there will be certain core requirements. Criteria should help regulators identify projects, infrastructure and SMEs which should benefit from policy initiatives designed to enhance the provision of funding to infrastructure and SMEs.

8.8 The Basel Committee on Banking Supervision outlines a number of principles around which securitisation criteria should be set. These are set out in the table below and could form the basis for criteria which must be met for access to the Hong Kong securitisation hub.[69]

Asset Risk	Structural Risk	Fiduciary / Servicer Risk
Nature of assets	Redemption cashflows	Fiduciary and contractual Responsibilities
Asset performance history	Currency and interest rate asset and liability mismatches	Transparency to investors
Payment status	Payment priorities and observability	

[68] When banks originate loans with the intention of distributing them into the capital markets it is important the distribution is done in a manner which aligns the interest of the originator with the investors. The U.S., EU and Japan have regulations which investors and originators must comply with to ensure securitisations have an appropriate alignment of interest

[69] The updated Basel III text is available here at www.bis.org

Consistency of underwriting	Voting and enforcement rights	
Asset selection and transfer	Documentation disclosure and legal review	
Initial and ongoing data	Alignment of interests	

Project criteria

8.9 With respect to infrastructure, the core asset of any securitisation will be the underlying infrastructure project. Technical risks in infrastructure projects may be severe and Chapter 9 (*An Enabled Eco-System in Project Delivery*) outlines some detailed proposals of how these risks can be mitigated through setting best practices.

8.10 Infrastructure project criteria should also draw on experiences elsewhere, for instance, the UNCITRAL Procurement and Infrastructure Development text[70] and the UK's Department for International Development report on urban infrastructure investments.[71]

SME criteria

8.11 Criteria for securitisations with SME loans as assets should take into account the history of the SME's business, the tenor and size of the loan and the purpose for which the loan can be used. The SME loan guarantee scheme in Hong Kong has a set of criteria which could form the basis for eligibility in infrastructure and SME-related securitisation transactions.[72]

Standardised documents

8.12 The approach to standardising documents need to take into account the market in question. For SME loans, it may be possible for lenders to agree an industry standard template, applicable across the market. Project loans are more complex and the likelihood of a single template being suitable for all transactions is low; in such cases certain key terms, relating to assignability, confidentiality and set-off could, however, be standardised across the market. With respect to infrastructure, procurement documentation, and construction

[70] The UNCITRAL text is available here at www.uncitral.org

[71] Details of the UK's scheme are available here at icai.independent.gov.uk

[72] Details of the scheme are available here at www.hkmc.com.hk

industry contracts are already, in many cases, standardised, though more work could be done to bring them in line throughout the full construction period.

Maintaining flexibility

8.13 Flexibility must be inherent in any set of criteria and any standardised documentation. As markets, economies and technologies move and change the criteria and use of standardisation should keep pace and ensure the objectives for using securitisation in relation to the infrastructure and SMEs continue to be met.

Verification

8.14 The EU STS rules highlighted above also provide for third parties to verify the compliance of a securitisation with the STS criteria. In order to qualify to provide such a verification, the third party must charge only cost-based fees, be independent of the other parties to the securitisation, provide no other services to the securitisation, have a management team with requisite professional qualifications, knowledge and experience, have sufficient independent directors on its board and demonstrate that it has proper operational safeguards to assess compliance with the STS criteria. A third party, to verify compliance with criteria, could be appointed in relation to the criteria set for access to an infrastructure and SME securitisation hub.

Chapter 9
An Enabled Eco-System in Project Delivery

9.1 Hong Kong as an international finance hub has a lot to offer in terms of funding and delivery of infrastructure projects. Establishing an enabling eco-system of project delivery is an important step towards making the pooling of such assets into securities which are attractive to institutional investors. This section focuses on discussing the essential elements, obtained from best practices, of an enabled eco-system to facilitate the delivery of infrastructure projects for inclusion in a Hong Kong securitisation hub.

Background

9.2 There are a number of execution risks in the development of major infrastructure projects, including cost overruns, delays, failed procurement and escalating final costs. To attract private finance investment in this sector, there is a need to provide more safeguards against risks in the procurement and delivery of infrastructure projects.

9.3 According to a 2017 report[73] by McKinsey, it was found that 9 out of 10 infrastructure megaprojects face cost overruns that add, on average, 70 per cent to the original budget. The research also indicated that the industry does a poor job in completing projects on time, with 61 per cent exceeding the original schedule. From the experiences of the various models and initiatives around the world, critical success factors and best practices on effective procurement of privately financed infrastructure projects can be drawn up.

9.4 Inclusion of these success factors and best practices to create an enabled eco-system in infrastructure projects during preparation, procurement and implementation stages could mitigate the technical risks[74] in the delivery of the asset and make projects more appealing to investors. Furthermore, these essential elements could be "standardised" in a template format to provide better understanding to and streamline the approval process of private investors for effective recurrent investment in different projects. In the context of a policy initiative such as the BRI, which involves a diverse range of participants, such standardisation could be particularly valuable.

Preparation and Planning Stage

9.5 **Development strategy**: Major infrastructure projects have long preparation and planning stages from inception to implementation. Hence, infrastructure projects need a development strategy that can address the uncertainties owing to long lead times and the variety of risks that the projects are exposed to

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[73] Filipe Barbosa, Jonathan Woetzel, Jan Mischke, Maria Joao Ribeirinho, Mukund Sridhar, Matthew Parsons, Nick Bertram, and Stephanie Brown, *Reinventing Construction Through Productivity Revolution,* Mckinsey Global Institute, Feb 2017

[74] *WBG Risk and return characteristics of infrastructure investment in low income countries*, OECD, 2015. Click here

throughout the assets' life cycles. A qualifying project for infrastructure securitisation should adopt the following aspects in its development strategy.

9.6 **Vision**: Infrastructure projects that are strategically aligned with a government's long-term objective to deliver economic growth and social well-being to the country and region would most likely be successful, as the government would be fully supportive of the success of the projects. Similarly, infrastructure projects that aim to bring maximum benefit to the development of the local economy, community and the environment, would be supported by local communities.

9.7 The vision of the infrastructure project should be clearly stated in the documentation at both the pre-qualification and tender processes and should aim to optimise the country's portfolio of infrastructure investment to be aligned with the development of the region and local communities. The project should also demonstrate how it would satisfy regional and local needs and address future demands.

9.8 **Infrastructure master plan**: A country's and the region's vision and goal should be manifested through an infrastructure master plan. The infrastructure master plan will detail the state of current infrastructure conditions and will lay out a vision for infrastructure in the future. The master plan will provide certainty to investors and all stakeholders with a clearly disclosed pipeline of future projects. With the provision of a timeline and prioritisation of the infrastructure portfolio in the master plan, investors would be able to foresee and assess the current and future risk during the life cycle of the projects. The infrastructure master plan would help to prioritise projects that are financially sound and viable.

9.9 In the absence of a comprehensive infrastructure master plan, the project proponent or public authority should provide at least a sectoral master plan, say for instance, a master plan focusing on the transportation sector or a master plan of all water infrastructure. The production of an infrastructure master plan (or a sectoral plan) at the outset of the projects should be an eligibility criterion for securitisations to benefit from governmental or regulatory support.

9.10 **Sustainable development**: Making projects sustainable from the economic, financial, and environmental perspectives, are important to stakeholders, including investors, project owners and governments. Environmental considerations in particular are becoming important investment decision criteria. For projects to be eligible to be included in a securitisation platform, the development of the projects should be guided by a sustainability framework[75] using generally acceptable tools and indicators and the United Nations 17

[75] There are many criteria and KPI to quantify the sustainability of an infrastructure project. Developing a common framework is needed to help clarify end goals and give a valuable basis for analysis to identify key actions, including roles and responsibilities, at different stages across the whole project life cycle. Inter-American Development Bank, Technical note No. IDB-TN-1388, *What is Sustainable Infrastructure? A framework to guide sustainability across the project cycle*, IDB Invest, March 2018

Sustainable Development Goals[76] as a blueprint. Projects in a Hong Kong securitisation hub should also demonstrate how they would contribute to the country or region NDC (Nationally Determined Contributions[77]) according to the Paris Rulebook.[78]

9.11 **Climate Change**: Climate events in recent years trigger growing attention to the likelihood of stranded assets because of climate change affecting the value of infrastructure asset over their long-life cycles. To be eligible for inclusion in the securitisation platform, infrastructure projects should demonstrate their broader visions and their contribution to regional and global goals, such as Paris Agreement on Climate Change, and Sendai Framework on Disaster Risk Reduction by showing that they are planned and designed for climate resilient. Resilient and adaptive infrastructure would also enhance social resilience of the communities.

9.12 **Improved preparation**: Governments could boost infrastructure productivity in three ways: improving project selection, streamlining delivery and standardising approaches.

9.13 With respect to project selection, countries that take time to get the planning right are more likely to eliminate non-economic projects and reduce project overruns. The key is to create a rigorous, transparent and fact-based process – an infrastructure diagnostic – to decide what needs to be done, and in what order.

9.14 Under a policy initiative like the BRI, and also infrastructure within the GBA, with Mainland China initiating and promoting programmes, a standardised approach in developing infrastructure diagnostic and streamlining delivery to gain the benefits of the economy of scale could more easily be adopted.

Procurement Stage

9.15 **Procurement structure and process**: The success of large scale infrastructure projects is influenced by the structure of the procurement (procedure) and the steps taken (the process) to implement the procedure. The procurement should aim to stimulate market appetite for the project to ensure there is sufficient competition from competent and qualified tenderers for

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[76] The Sustainable Development Goals are a collection of 17 global goals set by the United Nations General Assembly in 2015 for the year 2030. The SDGs are part of Resolution 70/1 of the United Nations General Assembly, the 2030 Agenda. United Nations Sustainable Development Goals, About the sustainable development goals, available here at www.un.org

[77] NDCs embody efforts by each country to reduce national emissions and adapt to the impacts of climate change. The Paris Agreement (Article 4, paragraph 2) requires each Party to prepare, communicate and maintain successive nationally determined contributions (NDCs) that it intends to achieve. See United Nations Climate Change, Nationally Determined Contributions (NDCs), available here at unfcc.int

[78] The Paris Rulebook will provide guidance for how countries should implement and strengthen their national climate plans under the Paris Agreement. The Rulebook's purpose is to transform the relatively short Paris Agreement into a functioning system that mobilises concrete climate action in every country around the world. Click here at unfcc.int

selection based on value for money (VfM).[79] The procedure and process should provide the optimal conditions for competition, transparency and efficiency.

9.16 **International standard documents**[80], such as those prepared by international agencies and other well accepted texts such as the UNCITRAL Procurement and Infrastructure Development text and the UK's Department for International Development Report on urban infrastructure investments that are generally acceptable to international investors, should be adopted.

9.17 When quality-based selection is used the relationship between tender price and quality must be unambiguously laid down in the tender documents. Embrace a pre-qualifying exercise to ensure tenderers have the requisite capabilities and experience for the type of project in question.

Implementation Stage

9.18 Unforeseen developments will occur during the long life-span of a typical privately financed pubic infrastructure project. For contracts to meet the whole-life expectation of projects, an effective governance structure and an agile management system are required.

9.19 **Governance structure**: Privately financed public infrastructure services combine the private sector's resources, management skills and technology with the public sector's regulatory actions and protection of the public interest. Hence, a well-defined and transparent governance structure of the project should be set up right from the preparatory phase of the project. The governance structure should ensure the clear lines of responsibilities, accountabilities, authority and risk allocation of all parties. There should be clear separation between the approval process and the project management process to ensure equitability and efficiency of the governance structure.

9.20 Too often, regulatory complexities hinder productivity. Mainland China can help reshape regulatory environments under, for instance, both the BRI and the GBA by streamlining licensing and approval processes, reducing informality and corruption, and encouraging transparency on cost and performance. The Mainland Government can also encourage innovation and new approaches by prescribing means and methods of delivery or requiring the use of certain technologies.

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[79] Value for Money (VfM) is the effective, efficient, and economic use of resources. In a procurement system VfM looks at factors other than only price, such as quality and expertise, and requires the evaluation of relevant costs and benefits, along with an assessment of risks, when selecting vendors or contractors. *Value for money guidance note on procurement*, ADB, June 2018

[80] Some of the most commonly used international standard contracts include the FIDIC suite of construction contracts is written and published by the International Federation of Consulting Engineers. The FIDIC acronym stands for the French version of the Federation's name (Federation Internationale des Ingenieurs-Conseil) and the NEC contracts. The New Engineering Contract (NEC), is a formalised system created by the Institution of Civil Engineers, UK that guides the drafting of documents on civil engineering and construction projects

9.21 **On-going management**: Review of successful projects that have been carried out by the Public Private Partnership Programme (4Ps)[81] in UK indicated that a crucial success factor was the setting up and provision of efficient management from project development and procurement to operation and asset hand-over stages along the entire project life cycle. An efficient and flexible management system and structure should be set up that factors in the whole life cycle of the project. The management team should comprise of personnel with the right skillsets to handle different requirements at different stages of the project, to proactively manage the contract, manage the relationships amongst all parties and stakeholders and manage the service performance.

9.22 **Structured risk management approach**: Risks associated with infrastructure projects are many and varied. This section only discusses management of technical risk of major infrastructure projects. As mentioned earlier, due to their complex nature and long-term characteristics, infrastructure projects would need a development strategy that could factor in uncertainties throughout their long-life cycles. Infrastructure projects also involve a large number of players with different roles, responsibilities and interests entering the project life cycle at different stages. These parties and stakeholders have different risk appetites and if the managing authority does not have a systematic knowledge about the risks in the infrastructure projects, risks would not be properly allocated to the players that are most suited to manage or absorb the risks. Undermanagement, insufficient risk identification capabilities and inadequate risk assessment at one stage of the project can significantly impact later stages.

9.23 A structured management approach that reflects the peculiarities of the infrastructure business should be established at the outset of projects. The process should undertake a forward-looking project life cycle risk assessment to identify and understand potential risks of projects at different stages. The use of appropriate tools, models and collaborative contract arrangements such as the Construction Manager/General Contractor (CM/GC) structure, the Construction Manager at Risk (CMAR) model and Enterprise risk management (ERM) could be adopted to assess and deal with risks both at the outset and throughout the project life cycle to ensure projects are completed on time and on budget.

9.24 **Digital technology and 3D collaborative platform:** In recent years, stakeholders of capital projects, project owners, project managers, contractors, local governments and investors are looking into adoption of digital tools to drive project performance and better monitoring of project progress. Digital twin technology is being used increasingly to provide three-dimensional virtual replica of a physical system or of a mega project. Combining with the latest

[81] The Public Private Partnerships Programme (4Ps) is a body set up by the predecessors to the Local Government Association to assist local authorities in England and Wales develop and deliver PFI projects and other partnerships with the private sector. 4Ps is now known as Local Partnerships, a joint venture between the Local Government Association and Partnerships UK, incorporating 4Ps and all its current services. Click here at thenbs.com

state of the art technologies in 5G, robotics, cloud-based management, BIM,[82] image processing, artificial intelligence, machine learning, sensing systems etc, a digital twin platform can enable a combination of both the digital and physical world to support the whole life development and monitoring of infrastructure and building development. With the provision of a 3D digital twin platform, it is possible to completely monitor time and resource utilisation against programme and budget in real time or almost real time. It allows up-to-date information to be fed back to stakeholders when the project is "connected" to all parties.

9.25 Infrastructure projects suffer from cost, schedule, risk, safety or quality issues that were not identified early enough for their impact to be mitigated and going digital helps bridge this gap. Digital collaborative platforms and tools using digital twin technology should be adopted in a Hong Kong securitisation hub, so that investors would be better and earlier informed.

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[82] BIM – the U.S. National Building Information Model Standard Project Committee: Building Information Modeling (BIM) is a digital representation of physical and functional characteristics of a facility. A BIM is a shared knowledge resource for information about a facility forming a reliable basis for decisions during its life-cycle; defined as existing from earliest conception to demolition

Initiatives

…we recognise that strong support from governments is essential for building an enabling financing system and environment… We encourage countries along the [BRI] routes to establish common platform(s) whereby countries in the region, while forging synergies of their development strategies and investment plans, map out strategies or plans for regional infrastructure development, formulate principles for identifying and prioritising major projects, coordinate their supporting policies and financing arrangements, and share experiences on implementation… We value the guiding role of public funds in planning and building major projects… We recognise the decisive role of the market in financial resources allocation… We recognise that financing arrangements for the development of the [BRI] should benefit all businesses and populations in a way that supports sustainable and inclusive development… We vigorously support efforts to promote inclusive finance, encourage governments, policy financial institutions, development finance institutions and commercial financial institutions to strengthen cooperation to ensure access to financial information and services for all, and provide proper, stable and affordable financial services for SMEs.[83]

[83] *Guiding Principles on Financing the Development of the Belt and Road*, 2017, signed by the Finance Ministers of Argentina, Belarus, Cambodia, Chile, China, Czech, Ethiopia, Fiji, Georgia, Greece, Hungary, Indonesia, Iran, Kenya, Laos, Malaysia, Mongolia, Myanmar, Pakistan, Qatar, Russia, Serbia, Sudan, Switzerland, Thailand, Turkey and the United Kingdom

Chapter 10
Supporting Institutional Investors

10.1 Over the past few years, some securitisation markets have gradually evolved to tackle a number of issues commonly raised by institutional investors. One factor which has driven this evolution is the regulatory constraint placed upon banks under Basel III, making long-term investments more expensive for banks and, consequently, making the funding which is available in capital markets look more attractive. While these are positive steps and go some way towards delivering capital markets funding to support infrastructure and SMEs, there is still much more which can be done. Additional measures should be the focus of infrastructure and SME securitisations.

10.2 Hong Kong and PRC regulators could apply preferential risk weights to infrastructure investments made by institutional investors which meet "high-quality" criteria and encourage other regulators to do the same. Similar measures have already been adopted in Europe, with the EIOPA creating a special set of "high-quality" structure tests which, if met, result in preferential risk weights. Around €40 billion was invested in such "high-quality" infrastructure by institutional investors in Europe during 2017.[84]

10.3 Regulators could require the adoption of standard documentation and disclosure requirements to provide appropriate information to investors and guidance to issuers on what is going to be required by investors. Multiple external credit ratings should be recommended, but provided the investor undertakes appropriate due diligence, should not be a requirement to qualifying for preferential risk weights.

10.4 Regulators and government bodies could play a significant role in facilitating the relationship between issuers and institutional investors. First, a dedicated agency could facilitate the process of receiving input or feedback from institutional investors and outlining and communicating investor requirements and preference to issuers. Regulators could also work with rating agencies or perform independent studies to examine the historical performance of infrastructure and SME debt.

10.5 As discussed elsewhere in this Report, the Hong Kong and Mainland China governments could buy the junior tranche in infrastructure and SME securitisations to improve investor confidence when participating in these securitisations.

10.6 While government support and regulatory changes may help generate an infrastructure and SME securitisation market and create liquidity, the requirements of institutional investors should remain firmly in the minds of issuers and structurers as, at the end of the day, it is institutional investors who will invest the money to contribute towards building infrastructure and supporting SMEs.

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[84] See EIOPA's report here at eiopa.europa.eu

Chapter 11
Targeted Government Support

11.1 Securitisation can be a key enabling funding source for Hong Kong to play a leading role in supporting infrastructure and SMEs. This reflects the October 2018 announcement by the HKMA to embark on an initiative to promote infrastructure finance by buying loan assets from banks and multilateral lenders and eventually packaging the portfolio of loans into securitisations, often called collateralised loan obligations (CLO), issued to institutional investors. By expanding the scope of this securitisation project to encompass more than just infrastructure loans, Hong Kong can broaden the role it plays and have a greater impact on both infrastructure and SMEs.

11.2 This section provides an overview of government support in advanced economies and puts forward recommendations based on success stories in the market. The focus of this section is on **fiscal support** where governments set aside dedicated funds to promote the growth of securitisation. Other forms of government support, in particular those related to the regulation of securitisation issuance and investment, are addressed in other sections of this Report.

Snapshot of Government Fiscal Support to Securitisation

11.3 **Direct government support to increase secondary market liquidity**: In the U.S. and elsewhere, governments have used the pooling of assets as a primary means to increase secondary market liquidity for residential mortgages and small business loans alike. The experience through the U.S. Small Business Administration (SBA) is especially relevant, including the 7(a) programme and the 504 programme.

11.4 The 7(a) programme guarantees loans *pari passu* with commercial lenders, up to 75-90 per cent of the loan balance. The guaranteed portion of the loans are typically pooled into securitisations, where the SBA puts another guarantee on timely payment of interest to the investors. Such securitisation investments are traded at levels similar to U.S. Treasury securities. The unguaranteed portions of the loans are also pooled into securitisations by some lenders.

11.5 The 504 programme provides second-lien loans to low (eg, 50 per cent) loan-to-value (LTV) commercial loans. Both the low LTV loans and the second lien SBA loans can be securitised.

11.6 Both programmes have been largely self-sustained by guarantee fees charged to the borrower, and the overall SBA budget is appropriated by the U.S. Congress with programme parameters (fee level, guarantee percentage, etc.) adjusted given the prevailing economic conditions.

11.7 To the extent the government puts on a securitisation-level guarantee, it is a great help to institutional investors as the capital charge to investors will be lower as it will be treated as a sovereign exposure rather than a securitisation exposure under the Basel capital requirements.

11.8 **Central Bank policy support**: Various asset purchase programmes have been used by central banks, to target asset-backed securities to increase liquidity and drive down funding costs for issuers. Making infrastructure related securitisations eligible might achieve similar results. An example of such policy support is the U.S. Community Reinvestment Act (CRA) of 1977. The goal of the legislation is to encourage banks to provide credit to the communities in which they operate, including low-income and moderate-income neighbourhoods. Banks can receive favourable CRA consideration for community development activities, including ones related to the low-income housing tax credit (LIHTC), new markets tax credit (NMTC), historic rehabilitation tax credit and renewable energy tax credits.[85]

11.9 **Other government fiscal support**: When aligned with the longer-term goal of economic development and job creation, governments can also provide economic incentives to investing in certain asset classes.[86]

11.10 **Creation of regulatory enabled assets**: In the U.S., certain states have passed legislation to create investor-friendly regulatory-enabled assets, such as the right for regulated utilities to charge user fees and regulations to put energy efficient investment loans ahead of mortgage loans such that they rank *pari passu* with property tax collections. These high-quality assets are then securitised to take advantage of very high ratings to drive down funding costs.

The Importance of Securitisation: the U.S. Case Study

11.11 A brief look at the most advanced securitisation market in the world – the U.S. – will inform the observer that the U.S. government is the promoter, risk taker, and benefactor of the securitisation product. The U.S. government understands that securitisation creates liquidity for illiquid assets, helps issuers and ultimately consumers and businesses to lower borrowing costs, diversifies and distributes financial risk away from banks and non-bank lenders and creates investment opportunities for institutional investors.

11.12 Ten years after the GFC, the U.S. government's stance on securitisation has evolved into that of a proactive promoter, evident in the extract below of a recent U.S. Treasury Department report to the President:

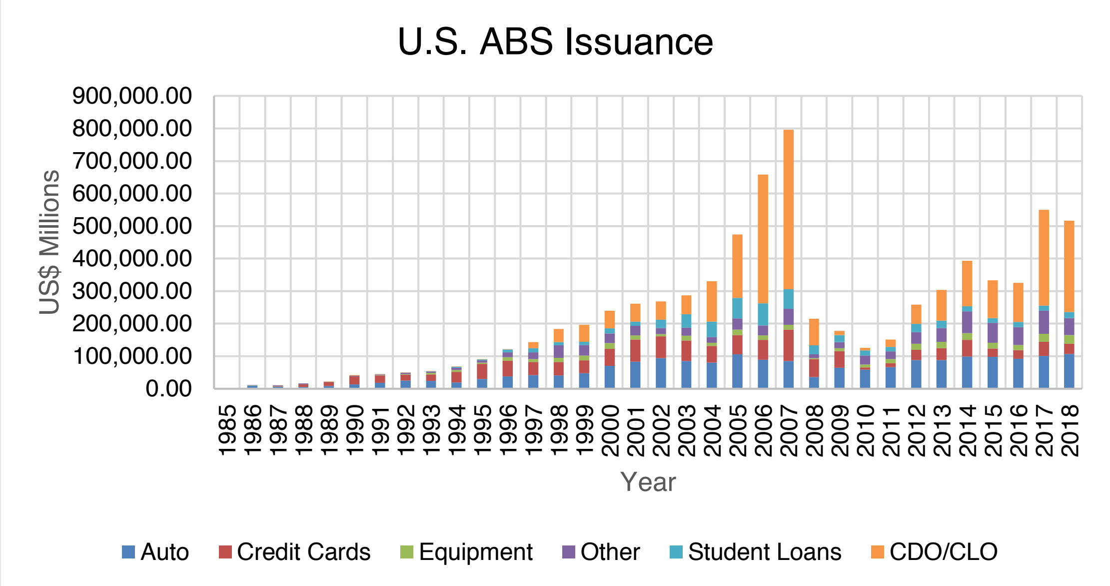
> "The securitisation market has acquired a popular reputation as an inherently high-risk asset class and has been regulated as such through numerous post-crisis statutory and rulemaking changes. Such treatment of this market is counterproductive, as securitisation, when undertaken in an appropriate manner, can be a vital financial tool to facilitate growth in our domestic economy… Rather than restrict securitisation through regulations, policymakers and regulators should view this component of our

[85] Details are available here at novoco.com

[86] The Hong Kong government's recent initiative to support aircraft leasing and promote solar energy production are two examples. In the U.S., the federal and state governments offer tax credit to investors in alternative energy. More directly, the Singapore government, through the Monetary Authority of Singapore, provides grants to partially underwrite costs associated with pilot securitisation programmes

capital markets as a by-product of, and safeguard to, America's global financial leadership". [87]

11.13 The following chart demonstrates that securitisation issuance, absent of certain asset classes (for example, collateralised debt obligations), has recovered to levels consistent to before the GFC.[88] In Europe where support mechanisms are still lagging, the recovery still has some way to go.



Developments in Securitisation Outside of the U.S.

11.14 In recent years, other advanced economies of the world, in particular those in the Asia-Pacific region, have similarly rolled out support programmes as the benefit of securitisation to the national economy becomes more compelling. In February 2019, the Australian government introduced legislation to implement the Australian Business Securitisation Fund (ABSF). The fund plans to invest up to AU$2 billion (US$1.4 billion[89]) in warehousing and the securitisation market, providing significant additional funding to smaller banks and non-bank lenders to on-lend to small businesses on more competitive terms.[90] Likewise, the Singapore government's support is credited for the successful inaugural issuance of the first regional infrastructure loan backed CLO, 100 per cent collateralised by projects located in Asia-Pacific and the Middle East.

11.15 For Mainland China, securitisation is taking on an increased importance because other sectors of the economy have become increasingly indebted. According to a recent report by Standard & Poor's (S&P),[91] the level of debt in

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[87] *A Financial System That Creates Economic Opportunities Capital Markets*, Report to President Donald J. Trump. U.S. Department of Treasury

[88] U.S. ABS Issuance and Outstanding, SIFMA. See here at www.sifma.org

[89] AU$ to US$ exchange rate of 0.6896 as of 24 May 2019

[90] Australian Business Securitisation Fund, see here at treasury.gov.au

[91] *Next Debt Crisis: Will Liquidity Hold?* S&P Global Ratings, March 2019

the non-financial sector, and the overall debt-to-GDP levels in Mainland China has increased substantially in the last decade.

11.16 At the same time, that S&P report highlights that banks' share of credit to the private sector (corporates and households) in Mainland China remains very high, especially compared to the U.S., where debt markets are more developed.

SMEs as the Heart of Economic Vitality

11.17 Small and medium enterprises, or SMEs, play a key role in economic growth, job creation, regional and local development as well as social cohesion. According to a 2018 OECD report, almost all businesses in the OECD area are small or medium-sized, and on average they generate around 60 per cent of total employment and 50 per cent to 60 per cent of value add. [92]

11.18 There is another equally compelling and urgent need to support SMEs. The experience in the U.S. shows that small businesses go on to become big ones in a constant and ever faster cycle of "creative destruction" – the process by which innovation and entrepreneurship destroy incumbent companies and create new ones. Over the years, the SBA has helped many of the best-known corporate icons get their starts; Intel, America Online, Outback Steakhouse, Apple Computer, Amgen, Ben & Jerry's, Callaway Golf, Staples, Under Armour, Nike and Federal Express all received help from one of SBA's programmes. Today, they are household names – some of the best-known businesses that were once 'small' and have grown to be 'big'. [93]

11.19 There is every reason to believe that for Hong Kong and the GBA's future economic development, support to SMEs – key among them financing – will be critical to its success. Yet despite calls on financial institutions to lend more to private firms, especially to SMEs, according a recent article by the South China Morning Post in 2018 just 29.0 per cent of total loans issued went to private businesses, a sharp drop from 57.5 per cent in 2017. Within that, almost one-third of new business loans were for real estate enterprises.[94]

11.20 Through SME securitisation, Hong Kong could help to induce an effective credit flow to SMEs. Government support is critical to jump start the SME sector in the GBA and policy initiatives have to be targeted and create concrete incentives aimed at bringing in institutional investors to the sector. Hong Kong, and the securitisation market, can play a vital role in this renewed drive.

Government Support in Securitisation: A Study in Creating Leverage and Impact

11.21 It is fair to say that modern securitisation owes its origins to government support. In the case of the U.S., residential mortgage backed securities (RMBS) can

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[92] *Highlights – Financing SMEs and Entrepreneurs*, OECD, 2018. Click here

[93] SBA at 65: *Continuing to Empower Entrepreneurs and Small Business Owners*. Click here

[94] *China's banks defy Beijing by pumping loans into property, despite economic slowdown*, SCMP, 5 April 2019. Click here

trace their origin to the three Government Sponsored Enterprises (GSEs): FNMA (Fannie Mae), FHMC (Freddie Mac) and GNMA (Ginnie Mae). They have played a critical role of achieving the U.S. government's objective to increase home ownership. In 1970, Ginnie Mae (which was created under the Fair Housing Act of 1968 when the U.S. Congress split Federal National Mortgage Association (Fannie Mae) into two separate corporations, FNMA and GNMA) issued the first residential mortgage-backed security, which pooled mortgage loans and allowed them to be used as collateral for securities sold into the secondary market. Subsequently in 1977, Bank of America issued the first private label residential mortgage pass-through bond.

11.22 In 1986, the U.S Congress passed the Tax Reform Act that included the Real Estate Mortgage Investment Conduit (REMIC) provision that enabled greater flexibility in structuring bond classes with varying maturities and risk profiles. At around the same time the first securitisations of automobile loans and bank credit card receivables were done.

11.23 Inspired by the success of mortgage-loan securitisations, the U.S. Congress passed the Riegle Community Development and Regulatory Improvement Act in 1994 to extend the benefits of the 1984 Secondary Mortgage Market Enhancement Act (SMMEA) to the small-business loan market and eliminate state-level investment restrictions and securities registration requirements. With the passage of the Riegle Act and subsequent policy changes, securitisation of the government-guaranteed portion of SBA loans has increased rapidly in recent years.[95]

11.24 What happened throughout the late 1990s and early 2000s is well known: securitisation took off in the U.S. and around the world, in most instances without further government support or regulation. Excesses in certain segments of the U.S. housing market, and securitisation derivatives that repackaged the risks into collateralised debt obligations (CDOs) contributed to the GFC in 2008. Governments around the world bailed out failed financial institutions. Other asset purchase programmes, and a whole range of new regulations, helped to create a revised securitisation market that is considered safer, more transparent and with better alignment of interests.

U.S. Government support of SME through Securitisation

11.25 A persistent challenge to funding SMEs in countries around the world poses an interesting question to policy makers and market participants alike: why does small business loan securitisation continue to languish? According to S&P, approximately 50 per cent of leveraged loans in the U.S. has been securitised in the form of CLOs in recent years. In the same study S&P said the total size of the CLO market is approximately 1,100 U.S. CLO transactions with an aggregate note balance (including equity) of more than US$645 billion since the mid-1990s. 2018 was the record year in the global CLO market,

[95] *Increasing Capital for Small Businesses: The Promise of Securitisation*, The Milken Institute, August 2008

characterised by strong investor demand, tightening credit spread, and renewed interest in alternative CLO collaterals.

11.26 In sharp contrast, small business loan securitisation peaked in 2007 when it had about US$20 billion outstanding, but the asset class has continued to struggle ever since with shrinking issuance volume throughout the economic recovery in the U.S. in the past decade.[96]

11.27 The key challenges to small business loan securitisations are the same as those faced by SME lenders. The Milken Institute report states that these obstacles include factors such as difficulty in standardising loan criteria, reliance on relationships in underwriting, lack of uniform underwriting standards, inadequate marketing and staff resources to increase deal flow and restrictions in working capital.[97]

SBA Guaranteed Loan Pool Securities

11.28 Most governments have support mechanism in place for SMEs. In a July 2015 report by International Organisation of Securities Commissions (IOSCO), a fact-finding survey was conducted among IOSCO members to gather insights and best practices within the various jurisdictions' SME markets. Forty-five jurisdictions responded to the survey, of which 31 respondents are Growth and Emerging Markets (GEM) members. Common among the support mechanisms are[98] government guarantees, special guarantees and loans for start-ups, government export guarantees, trade credit, direct lending to SMEs, subsidised interest rates, venture capital, equity funding, business angel support, SME banks and bank targets for SME lending, central bank funding to banks dependent on net lending rate.

11.29 The same IOSCO report stated:

> "The SME financing challenge has been exacerbated following the introduction of significant financial regulatory reforms in the aftermath of the global financial crisis, heightening banks' risk aversion when extending loans. Capital markets therefore have an imperative role in bridging this financing gap through the provision of alternative funding sources for SMEs, particularly as their needs evolve over the different phases of their life cycle."

11.30 The U.S. is a country where the support takes a further step in developing such capital markets imperative, specifically through promoting the secondary market liquidity of pooled small business loans. Through the SBA's secondary market loan pooling programme, SBA pools are modified pass-through securities that are assembled using the guaranteed portions of SBA 7(a) loans

[96] *U.S. Small Business Loan Performance Index: Collateral Performance Remained Stable In 2017*, S&P, 2017

[97] *Increasing Capital for Small Businesses: The Promise of Securitisation*, The Milken Institute, August 2008

[98] *SME Financing Through Capital Markets*, Final Report, The Growth and Emerging Markets Committee of the International Organisation of Securities Commissions, July 2015

under the authorities granted to the SBA by the U.S. Congress through the Secondary Market Improvements Act of 1984. [99]

11.31 Prior to 1984, loans were sold individually. Buyers were few and far between and liquidity was limited.[100] In recent years, the key acquirers of pools of SBA loans have grown this asset class to US$8 billion, or about 50 per cent of the loan amount guaranteed in 2018.

11.32 In order to support the timely payment guarantee requirement, SBA established the Master Reserve Fund (MRF), which serves as a mechanism to cover the cost of SBA's timely payment guarantee. One of the SBA's goals is to achieve a zero-subsidy rate for its loan guarantee programmes. A zero-subsidy rate occurs when the SBA's loan guarantee programmes generate sufficient revenue through fee collections and recoveries of collateral on purchased (defaulted) loans to not require appropriations to issue new loan guarantees.[101]

Business Loan Credit Subsidies, 7(a) and 504/CDC Loan Guaranty Programs, FY2007-FY2018

(US$ in millions)

FY	7(a)	504/CDC	Total Subsidy
2007	$0.0	$0.0	$0.0
2008	$0.0	$0.0	$0.0
2009	$0.0	$0.0	$0.0
2010	$80.0	$0.0	$80.0
2011	$80.0	$0.0	$80.0
2012	$139.4	$67.7	$207.1
2013	$213.8	$102.5	$316.3
2014	$0.0	$107.0	$107.0
2015	$0.0	$45.0	$45.0
2016	$0.0	$0.0	$0.0
2017	$0.0	$0.0	$0.0
2018	$0.0	$0.0	$0.0
2019	$0.0	$0.0	$0.0

11.33 Since 2008, the 7(a) programme provided loan guarantees to over 626,000 loans for a total sum of US$93 billion. Before and after the GFC, the zero subsidy rates were maintained. During the GFC, the U.S. government lowered the guarantee fee in order to encourage lending to small business.

11.34 For the total costs to the 7(a) programme of US$500 million, the programme supported US$193 billion loans, or 26 basis points. At end of 2018, the total outstanding balance of the SBA loan guarantee programme stands at US$92 billion, an estimated 7.7 per cent of the estimated small business credit market

[99] For more detail click here

[100] *SBA Securities: A Strategic Addition to your Portfolio*, Vizo Financial, April 2018. See here

[101] Small Business Administration 7(a) loan guarantee programme, updated 4 March 2019

(outstanding bank loans of US$1 million or less, plus credit extended by finance companies and other sources) is roughly US$1.2 trillion.

Other Government Support Schemes

11.35 While the discussion thus far has focused on fiscal support, other forms of government support can be equally effective. In this section some of these other cases are outlined.

The U.S. Community Reinvestment Act (CRA)

11.36 The U.S. congress passed the CRA in 1977 which addresses how banking institutions meet the credit needs of the areas they serve, particularly in low- and moderate-income (LMI) neighbourhoods. The banking regulators issue CRA credits, or points, where banks engage in qualifying activities—such as mortgage, consumer, and business lending; community investments that occur with a designated assessment area. These credits are then used to issue each bank a performance rating. The CRA requires these ratings be taken into account when banks apply for charters, branches, mergers, and acquisitions among other things.[102]

11.37 The CRA was subsequently revised in 1989 to require public disclosure of bank CRA ratings to establish a four-tiered system of descriptive performance levels (i.e., Outstanding, Satisfactory, Needs to Improve, or Substantial Noncompliance). In 1995, the CRA examination was customised to account for differences in bank sizes and business models.

11.38 Loan securitisation is a major facet of bank asset management, and current CRA guidelines allow securitised loan purchases to count toward CRA compliance. Many banks could allocate CRA lending more efficiently by increasing the securitisation and trading of CRA-qualifying loans.

11.39 The added value of CRA vouchers over securitisation lies in the fact that CRA vouchers transfer regulatory credit for CRA compliance without altering the credit risk of the banks involved in the voucher transaction. They accomplish this by effectively separating the regulatory value of CRA loans from their cashflow value and creating a market for trading the regulatory value while leaving the cashflow value intact. CRA vouchers thus represent a niche market that can coexist with loan securitisations to give banks increased flexibility in meeting both their CRA compliance and risk management objectives.[103]

11.40 This mechanism, whereby banks are given the choice of lending directly to policy-targeted sectors or purchasing securitisations collateralised by loans in the same targeted sectors, could be a particularly effective mechanism to encourage lending to small businesses in the GBA.

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[102] *The Effectiveness of the Community Reinvestment Act*, Getter, January 2015. See here

[103] Ibid.

Property Assessed Clean Energy (PACE) Programmes

11.41 PACE is an innovative financing tool that emerged in the late 2000's to address a whole host of challenges faced by energy efficiency and renewable energy projects: high up-front costs, long investment return window, and the frequent misalignment of interest between those who invest and those who benefit. For home owners, residential PACE or R-PACE loans allow a home owner to invest in energy efficient projects without having to worry if he or she moves in 5 years he or she would have to continue to pay for the improvement while the next homeowner enjoys the energy saving. Similarly, for commercial property owners, commercial PACE or C-PACE loans enable them to invest in energy efficient projects in such a way that both the costs and savings are passed on to the tenants. In both instances, PACE loans achieve this alignment of interests by attaching the financing to the improved property via a voluntary tax assessment, rather than recourse to the property owner.

11.42 Property owners who participate in PACE programmes agree to the imposition of a special assessment on their property which is equal in priority and generally payable together with the property owner's ad valorem real estate taxes. Similar to a tax lien, these special assessments which may be recorded in the land title records, constitute a lien against the property (and not solely against the improvements) and remain with the property until it is repaid in full. Therefore, the special assessments would be paid senior to new and existing mortgages in the event of a default. However, the PACE assessment typically may not be accelerated. Therefore, only past due payments would be paid senior to a mortgage upon default. The remaining balance and all future payments are assumed by the new property owner.

11.43 The senior lien position makes PACE loans attractive to their investors which in turn lowers the interest rates to competitive levels: another reason PACE programmes are growing in a number of states. According to industry statistics, at the end of 2014 California has completed about US$500 million in residential PACE projects for around 25,000 homes. The commercial market has closed about US$100 million in completed projects. The approximately US$600 million in completed projects is up from about US$60 million in 2013. Today, 31 states and the District of Columbia have passed legislation enabling PACE programmes, with yet more states considering similar legislation.

11.44 The initiatives listed above demonstrate that governments can play a significant role in the promotion and development of the securitisation market to create great benefits for SMEs. The success of U.S. government support in the securitisation space – especially in SME securitisation – can serve as a model for Hong Kong government support for SMEs in the GBA.

Government's Role in Promoting Loan Data Exchange

11.45 As important as fiscal support, government can play an equally important role in promoting data exchange and under certain circumstances being the custodian of the data. In the U.S. for the small business sector, this function was fulfilled by the Small Business Financial Exchange. Today it contains financial payment history on 32 million small and micro businesses, collected over 17 years since 2001. Most of the large banks and specialty lenders in the U.S. contribute data into this exchange, and at the same time have access to data contributed by other members.

11.46 The Small Business Financial Exchange, familiarly known as SBFE®, is a not for profit trade association with a key mission of gathering and protecting the largest aggregation of small business payment data in the U.S. today and leveraging the power of that data to help the small business industry build a true and accurate picture of small business.

11.47 On top of the information, Equifax Inc., one of the three credit bureaux, developed credit metrics for use by the members of SBFE and other paying customers.

11.48 The resulting small business credit profile has become one of the most comprehensive and commonly used measure of small business credit in the U.S. and helped to create a more uniform standard to assessing small business credit risk.

11.49 Something similar to this would be helpful for the GBA to collect and process small business risk in the combined areas as a way to promote the growth of small business securitisation.

SME Defined

11.50 Business size varies from country to country and within one country from lender to lender. What might be a small business in one setting might be a medium one in another. From a policy perspective, defining the scope of SME is important as generally speaking the goal should be to maximise the impact of the support to as many businesses as possible without extending such support to those big enough who can stand on their own. The following is a sample of small business definitions:

Hong Kong	Enterprises with fewer than 100 employees and non-manufacturing enterprises with fewer than 50 employees are regarded as SMEs
Mainland China	SME can be an enterprise with 1 to 3000 employees; total assets from 40 to 400 million yuan (US$5.8 to 58 million[104]) and business revenues from 10 to 300 million yuan (US$1.4 to 43.4 million[105]) depending on the industry

[104] Yuan to US$ exchange rate of 6.9049 as of 24 May 2019

[105] Yuan to US$ exchange rate of 6.9049 as of 24 May 2019

EU	SME is an enterprise with up to 250 employees and turnover of no more than €50 million (US$56 million[106]) or a total balance sheet of no more than €43 million[107]
U.S. – Agriculture	Maximum of US$750,000 in average receipts
U.S. – Mining	Maximum of 250 to 1,500 employees depending on subsector within mining
U.S. – Utilities	Maximum number of employees ranges from 250 (for renewable electric power generation subsectors) to 1,000 (for electric power and natural gas distribution businesses)
U.S. – Construction	Maximum of US$36.5 million in average receipts
U.S. – Manufacturing	Maximum number of employees ranges from 500 to 1,500 (with approximately 27 per cent of all manufacturing businesses having a maximum employee cap at 500 employees)

11.51 Depending on the amount of government support available, the scale should be set on the smaller end to ensure that the least amount of resources spread to the greatest number of businesses.

Recommendations

11.52 Taking into account international comparators, the most effective support mechanisms tend to use leverage, to apply a modest amount of government resources in achieving the maximum impact.[108] Specifically, the following categories of support in Hong Kong should be recommended to help to achieve the policy goals of the supporting infrastructure and SMEs.

11.53 Establish grant programmes to help issuers of securitisation, in particular small and/or non-bank lenders to tap the capital markets. Securitisation execution can have high upfront costs, especially for small, first-time issuers. The grants

[106] € to US$ exchange rate of 1.1198 as of 24 May 2019

[107] *A Universal Definition of Small Enterprise: A Procrustean bed for SMEs?*, World Bank, August 2010. Available here

[108] For example, it is estimated that the cost of U.S. government to support highly level of lending to the U.S. small business during the Great Financial Crisis was 26 basis points during a 10-year span

can help sharing some of high initial costs: structuring, legal, rating, accounting, etc.

11.54 Establish investment credit to encourage banks to indirectly lend to targeted sectors such as SMEs, if promotion of direct lending has been less then effective. For banks that are uncomfortable or unskilled to lend to small businesses directly, investment credit may incentivise them to indirectly lend to the sector by investing in securitisations of pooled exposures to the small businesses.

11.55 In addition to direct guarantees of loans in infrastructure projects and SME sectors, as the government in Mainland China at the national and local levels already does, guarantee programmes, like the U.S. SBA programme for SMEs, could be established that are aimed at increasing the secondary market liquidity of loan portfolios and securitisations.

11.56 Help to improve the data exchange of SME or project loan payment and credit underwriting information.

Chapter 12
Regulatory and Agency Support

12.1 This Chapter looks at what other steps could be taken by regulators and government authorities in Mainland China and Hong Kong to facilitate Hong Kong's emergence as a securitisation financing hub for infrastructure and SMEs, irrespective of whether investors providing the financing are from Mainland China, Hong Kong or overseas.

Enhancing cross-border flows

12.2 The commencement of Northbound Trading under Bond Connect in July 2017 has cemented Hong Kong's status as a financing hub for local and overseas investors in their access of the China interbank bond market (CIBM). To-date, Hong Kong and overseas investors have participated via Northbound Trading under Bond Connect in a range of securitisations issued in the CIBM which are backed by underlying assets originated by entities in Mainland China, including residential mortgage loans, auto loans or consumer instalment receivables in the format of asset backed notes (ABN). To the extent securitisations relating to or backed by financial assets linked to infrastructure or SMEs are issued in the CIBM, investors from Hong Kong or overseas could already participate via Bond Connect. However, investors from Hong Kong or overseas are currently not able to access securitisations issued in the Exchange Market via Bond Connect – the Exchange Market represents 47 per cent of the new securitisation issuances in 2018 and is where the majority of infrastructure and SMEs securitisations are expected to be issued.

12.3 Regulators should consider putting in place measures (whether by expanding Bond Connect or otherwise) to enable Northbound investment from Hong Kong or overseas in infrastructure and SMEs securitisations issued in the Exchange Market in Mainland China.

12.4 In addition to facilitating investors from Hong Kong and overseas to participate in infrastructure and SME securitisations in Mainland China, another key role for Hong Kong could be to facilitate institutional investors from Mainland China investing in infrastructure and SME securitisations issued in Hong Kong.

12.5 Regulators should consider putting in place measures to facilitate institutions from Mainland China to invest in infrastructure and SME securitisations issued in Hong Kong. This may be achieved by, among others, starting a pilot programme for Southbound trading under Bond Connect or creating a dedicated pilot quota under the Qualified Domestic Institutional Investor scheme for infrastructure and SME securitisations.

Infrastructure and SME securitisations backed by assets in Mainland China

12.6 Issuers in Mainland China wishing to raise foreign debt are typically subject to certain conditions including potential registration requirements of the NDRC and SAFE. The issuer of a securitisation is typically a newly established, single use, special purpose vehicle (SPV) which is intentionally separate from the originator. To the extent that infrastructure and SME securitisations are originated by entities or are backed by assets in Mainland China, it is not clear which of the NDRC and SAFE requirements on foreign debt are applicable, and which entities (eg, the originators or the SPV) will be responsible for performing such requirements.

12.7 Regulators in Mainland China could clarify the application of NDRC and SAFE regulation to infrastructure and SME securitisation where they are backed by assets in Mainland China. For instance, by specifying which of the existing requirements on foreign debt apply, which entities (eg, originators, SPV or others) are responsible for complying with such requirements and what are the processes for complying with such requirements.

Enhance Hong Kong's competitiveness as a hub for infrastructure and SME Securitisations

12.8 The Qualified Debt Instrument (QDI) scheme in Hong Kong provides tax exemption to interest income and trading profits of investors arising from qualified debt instruments in accordance with the Inland Revenue Ordinance of Hong Kong (IRO). One of its objectives is to enhance the competitiveness of Hong Kong as a financing hub for debt instruments, including securitisations. A QDI is a debt instrument which satisfies a list of conditions specified in the IRO including that it has a credit rating acceptable to the HKMA from a credit rating agency recognised by the HKMA. The HKMA requires a minimum of an investment grade rating from one of Fitch Ratings, Moody's Investor Service, Rating and Investment Information, Inc. or Standard and Poor's Rating Services.

12.9 The minimum investment grade rating in the definition of QDI limits the effectiveness of the QDI scheme in attracting infrastructure and SME securitisations to issue in Hong Kong. There are a number of ways this limitation plays out. For instance, infrastructure securitisations often involve projects located in jurisdictions with non-investment grade sovereign ratings and are not able to satisfy the investment grade rating requirement. Also, many SME securitisations may involve financial assets located in Mainland China and it would be exceptional for such a transaction to be rated by any of the credit rating agencies recognised by the HKMA because securitisation regulations in Mainland China typically require ratings by at least one of the domestic rating agencies in Mainland China.[109] Such domestic credit rating agencies have much longer track records in rating domestic securitisations in Mainland China compared to any of the rating agencies recognised by the HKMA in the QDI scheme. Finally, mezzanine tranches in securitisations assume more risk as compared to senior tranches and are often rated below investment grade and subordinated tranches in securitisations, which assume the "first loss" position, are not usually able to be rated at all. The ability to source investors for mezzanine and subordinated tranches in securitisations is often critical prior to any securitisation being issued and it is important that as a financing hub, Hong

[109] Such credit rating agencies would also have a longer track record of providing credit ratings to financial assets in Mainland China so may, in fact, be better placed to provide the credit ratings

Kong could attract investors for such tranches for infrastructure and SME securitisations.

12.13 Hong Kong regulators should consider amending the credit rating requirement of QDI (at least for infrastructure and SME securitisations) such that the requirement for credit rating is removed altogether or, if such requirement is maintained, expand the list of acceptable credit ratings to include non-investment grade ratings and recognise rating agencies operating in Mainland China with track records in rating securitisations.

Mobilise investor funds within Hong Kong for infrastructure and SME securitisations

12.14 Minimum requirements of investment grade credit ratings from international rating agencies are often "hard-wired" as mandatory requirements into either regulations or internal manuals of investors based in Hong Kong (eg, the Mandatory Provident Fund Schemes Authority's Guidelines on Debt Securities impose the same minimum credit rating requirement as those discussed above under QDI) and, for the reasons outlined above, effectively prevent institutional investors within Hong Kong which are subject to such requirements from participating in infrastructure and SME securitisations.

12.15 Regulators should consider amending regulations by removing any minimum investment grade credit rating requirement tied to specific credit rating agencies. To ensure investors do not take on excess risk as a result of such amendment, a maximum size restriction (eg, no more than x per cent of a portfolio) could be imposed to limit the portion of a portfolio which does not carry investment grade credit ratings from specific credit rating agencies.

Creating momentum in infrastructure and SME securitisations

12.16 Whilst the securitisation market in Mainland China has grown to be the second largest market globally,[110] the securitisation market in Hong Kong has been quiet in the past 10 years. This lack of regular new issuances has resulted in many of the investors in Hong Kong losing familiarity with securitisations which in turn makes it difficult for them to look at new types of underlying assets such as those under infrastructure and SME securitisations.

12.17 In order for Hong Kong to regain its status as a leading financing hub for securitisations, and contribute to the success of policy initiatives like the BRI and GBA, it is important that investors are offered regular opportunities to invest in new securitisation transactions (ideally backed by assets that they are familiar with as a start). To this end, the Hong Kong government (or public sector entities) should take the lead in starting regular programmes of securitisations initially backed by assets in Hong Kong that investors are familiar with. One possibility is for the Hong Kong government to undertake a

[110] Mainland China's securitisation market had total outstandings of 2.7 trillion yuan at the end of 2018. See Moody's, March 2019 here at www.moodys.com

securitisation of tolled tunnels and bridges owned by the government similar to the highly successful Hong Kong Link 2004 Limited transaction.

12.18 Private sector financial asset owners (such as banks) should also be encouraged to issue securitisations on a regular basis. One such form of encouragement may be in the form of public sector entities (eg, the HKMA or the HKMC) accepting certain securitised instruments originated by Hong Kong entities as permitted collateral in such public sector entity's provision of liquidity support to entities under their existing liquidity support regimes or programmes.

Off-balance sheet treatment for originators

12.19 De-recognition of financial assets (such as a pool of infrastructure project loans or SME loans) from an accounting perspective is often a goal for the originator in a securitisation. Where the originator is a licensed financial institution it may also seek to achieve regulatory off-balance sheet treatment, reducing the amount of regulatory capital it needs to hold, thereby de-leveraging. De-leveraging serves as a way for originators to enhance their financial position by diversifying their funding sources and reducing their borrowing costs. In short, de-leveraging could free up the lending capacity of the financial institutions, allowing them to further invest in other projects and SME loans which could then also be securitised. Such actions could, over time, therefore increase the volume of securitisation and achieve a sustainable cycle.

12.20 Nonetheless, the requirements of accounting standards in this area (under, for example, International Financial Reporting Standards) are complex and it is generally difficult for an originator to achieve off-balance sheet treatment. The two main obstacles are ensuring that securitisation vehicles are not consolidated on to the originator's balance sheet and ensuring the originator does not retain substantial risks and rewards of the financial assets which are being securitised. The latter is often difficult to achieve if the originator retains the most subordinated tranche in a securitisation, which could be required due to the need for credit enhancement, lack of demand for such securities, or certain regulatory restrictions.

12.21 If the governments in Mainland China and Hong Kong and other regional governments can provide guarantee programmes or buy the junior tranches in securitisations (in the manner mentioned in Chapter 11 (*Targeted Government Support*), such fiscal support could assist originators in meeting accounting requirements for off-balance sheet treatment and encourage them to grow larger lending businesses. Simultaneously, the government support could also help boost investors' confidence and increase demand for securitisation.

Hong Kong tax considerations

12.22 Any special purpose vehicles established in Hong Kong for use in securitisation transactions will need to be tax neutral.

12.23 Hong Kong has stringent interest expense deduction rules which may make tax neutrality difficult. For example, section 16(2)(f) of the Inland Revenue Ordinance (Cap. 112) provides that interest expenses are deductible in respect of interest payable on "*any agreement or arrangements, where the issue of an advertisement, invitation or document in respect of the agreement or arrangements has been authorised by the Securities and Futures Commission under section 105 of the Securities and Futures Ordinance (Cap. 571), and the advertisement, invitation or document has been issued to the public*". In practice, in circumstances where the invitation for subscriptions is issued privately to professional investors, as opposed to publicly, the Inland Revenue Department may provide an advance tax ruling accepting the condition under section 16(2)(f) is met and therefore the interest expenses should still be deductible, if other conditions are satisfied. A change to Inland Revenue Department practice to make such advance tax rulings automatic for infrastructure and SME-related securitisations would assist a growing Hong Kong securitisation market.

Reducing cross-border inefficiency due to PRC withholding tax

12.24 Securitisations in Mainland China, such as those in the GBA, issued in Hong Kong would potentially be subject to PRC withholding tax and this creates an additional inefficiency for Hong Kong's role as a securitisation hub. PRC regulators should consider reducing or eliminating such withholding tax for securitisations which meet certain requirements.

Summary of Recommendations

12.25 Regulators should consider putting in place measures (whether by expanding Bond Connect or otherwise) to enable **Northbound** investment from Hong Kong or overseas in infrastructure and SME securitisations issued in the **Exchange Market** in Mainland China.

12.26 Regulators should start a pilot programme for **Southbound** trading under Bond Connect or create a dedicated pilot quota under the Qualified Domestic Institutional Investor scheme for infrastructure and SME securitisations.

12.27 Regulators in Mainland China could clarify the application of NDRC and SAFE regulation to infrastructure and SME securitisation where they are backed by assets in Mainland China. For instance, by specifying which of the existing requirements on foreign debt apply, which entities (eg, originators, SPV or others) are responsible for complying with such requirements and what are the processes for complying with such requirements.

12.28 Hong Kong regulators should consider amending the credit rating requirement of QDI (at least for infrastructure and SME securitisations) such that the requirement for credit rating is removed altogether or, if such requirement is maintained, expand the list of acceptable credit ratings to include non-investment grade ratings and recognise rating agencies operating in Mainland China with track record in rating securitisations.

12.29 Regulators should consider amending regulations by removing any minimum investment grade credit rating requirement tied to specific credit rating agencies.

12.30 The Hong Kong government (or public sector entities) should take the lead in starting regular programmes of securitisations initially backed by assets in Hong

Kong that investors are familiar with. One possibility is for the Hong Kong government to undertake a securitisation of tolled tunnels and bridges owned by the government, similar to the highly successful Hong Kong Link 2004 Limited transaction.

12.31 Public sector entities (eg, the HKMA or the HKMC) could accept certain securitised instruments originated by Hong Kong entities as permitted collateral in such public sector entity's provision of liquidity support to entities under their existing liquidity support regimes or programmes.

12.32 The governments in Mainland China and Hong Kong and other regional governments can provide guarantee programmes or buy the junior tranches in securitisations to assist originators in meeting accounting requirements for off-balance sheet treatment and encourage them to grow larger lending businesses.

12.33 Inland Revenue Department practice should be updated to make advance tax rulings relating to deductibility automatic for infrastructure and SME-related special purpose vehicles.

12.34 PRC regulators should consider reducing or eliminating such withholding tax for securitisations which meet certain requirements.

Chapter 13
Embracing FX

13.1 The currency of underlying financial assets – such as infrastructure revenues, project loans or SME loans – remains a key obstacle in designing attractive securitisation products denominated in currencies that are unlikely to depreciate in value or fluctuate greatly in value – so called “hard currencies” which are demanded by international institutional investors. The fact remains that the vast majority of loans originated in Asia-Pacific are advanced in local currencies, supported by matching cashflows in local currencies. According to Dealogic, of the US$129 billion of project finance and infrastructure loans and bonds originated in 2016, only 26% were denominated in US$, with the remaining 74% denominated in local currencies. While this is an improvement compared to 2010, which had a US$ share of only 10%, the share of origination denominated in hard currencies has languished in recent years. This currency mismatch is even more daunting in the context of the GBA, as virtually all SME loans and receivables in Mainland China are denominated in RMB.

13.2 A securitisation hub in Hong Kong will seek to attract capital from international institutional investors in developed economies with hard currencies. Non-deliverable forward (NDF) markets can be used by investors to hedge currency mismatches, however there are not well-developed NDF markets in Hong Kong for the local currencies of some countries which have significant demand for infrastructure and this makes it difficult for international investors to cost-effectively hedge currency mismatches. Clearly, as the goal of a securitisation hub is to bring international institutional investors to the region, finding a way to accommodate currency mismatches is critical. Without a solution to this problem, capital will not flow from international institutional investors to support infrastructure and SMEs.

13.3 Hong Kong can be part of the solution to this currency mismatch problem. And with no capital control policies and with a currency pegged to US$, Hong Kong is well suited for the role. According to a triennial survey conducted by the *Bank for International Settlements*, Hong Kong had the second largest foreign exchange market in Asia and the fourth largest in the world in 2016, with net daily average turnover of foreign exchange transactions reaching US$437 billion.[111] Further, according to SWIFT, Hong Kong was the largest offshore RMB clearing centre in 2018, handling about 79% of the world’s RMB payments.

13.4 For foreign exchange, from a policy and government support perspective, there are a few areas where attention can be focused.

13.5 For infrastructure and SME securitisations that are issued in Hong Kong in RMB and/or which have underlying RMB assets, the benefit of the more competitive onshore CNY to US$ hedging rate is not currently available and instead the offshore CNH to US$ hedging rate must be used. This is a competitive disadvantage for Hong Kong as a financing hub for infrastructure and SME

[111] HKTDC, click here at www.hktdc.com

securitisations and the People's Bank of China (PBOC) and the HKMA could issue guidelines around how offshore investors and special purpose vehicles involved in in RMB-backed or RMB-denominated infrastructure and SME securitisations can use onshore CNY hedging rates to hedge their RMB exposures.

13.6 For infrastructure and SME securitisations denominated in other local currencies, the key issue is to isolate the stand-alone credit risk of the underlying assets from the sovereign risk and currency transfer and convertibility risk of the country where those assets are located.

13.7 To illustrate this point, if a pool of infrastructure loans, relating to high quality projects, is denominated in various illiquid local currencies and the risks relating to the illiquid local currencies are removed, the remaining risk in the pool would be to the high quality projects. From the perspective of international investors, those high quality projects present the least risk. But for the fact that the projects are located in countries where sovereign default or transfer and convertibility risks are acute, this pool of loans would be as attractive as a pool found in a developed economy with a hard currency.

13.8 To remove the sovereign risk as well as transfer and convertibility risk from a pool of infrastructure or SME assets, such risks could be assumed by a strong counterparty in Hong Kong – for instance, a government agency or authority in Mainland China or Hong Kong or a commercial insurance provider.[112]

13.9 Once a strong counterparty has taken on this particular element of risk, that counterparty could then share or transfer all or some of it to a combination of state-owned entities in Mainland China (eg, China Development Bank/Sinosure), who could then selectively further share or transfer it to local governments in the jurisdiction where the underlying infrastructure or SME assets are located. By mitigating the transferability and convertibility risk in a cross-border securitisation for infrastructure projects and SMEs, investors' concerns on sovereign risks can be addressed, as well as any caps investors place on sovereign exposures.

13.10 A further way the government can promote investments in infrastructure and SME securitisations is for the governments in Mainland China and Hong Kong to develop economic trading partnerships with regional countries to promote currency intermediation or other bilateral programmes to help mitigate the foreign currency risk exposures of international investors.

13.11 Hong Kong regulators could also work with the central banks of regional countries to enter into bilateral swaps to enable liquidity for hedging.

[112] Another source could be multinational institutions, though many multinational institutions already participate in mitigating project and or sovereign risks in infrastructure lending and thus suffer from capacity constraints

Chapter 14
Building a Practical Dispute Resolution Forum

Chapter Overview

14.1 This Chapter provides an overview of Hong Kong as the leading centre for international legal and dispute resolution services in the *Asia*-Pacific region, and its existing strong link with the Mainland China in the legal services sector. Under the principle of "One Country, Two Systems", and with a deep-seated tradition in the rule of law, Hong Kong is well positioned in fully embracing and capitalising on the opportunities presented by a securitisation hub in Hong Kong, particularly in respect of two grand strategies rolled out by China – the BRI and the GBA.

14.2 Hong Kong will not, however, lose sight of the challenges lying ahead. Language barriers, diversifying cultures and long geographical distance are just some of the major obstacles that one can imagine in the conduct of trade and business along BRI.

14.3 In particular, BRI presents a real challenge in the management of infrastructure and construction contracts. As infrastructure projects are typically complex and involve multiple parties, differences and disputes are unavoidable and can result in delays and higher costs, if not managed well. It was found that infrastructure, mining and oil and gas projects have on average cost 80 per cent more than budgeted and run 20 months late.[113]

14.4 Under the GBA, challenges should not be under-estimated either. With GBA comprising two Special Administrative Regions,[114] three different legal systems and nine municipalities of the Guangdong province,[115] inter-city cooperation would not be an easy task.

14.5 Challenges come to Hong Kong to make it better, not bitter. With strong faith in the talent of its legal professionals and the robust legal system, Hong Kong has every confidence in turning those challenges into opportunities. The last part of this Chapter makes several recommendations in further buttressing Hong Kong's position as an international legal hub and preparing itself for the upcoming challenges.

Strength of Hong Kong

14.6 **Hub for Deal-making and Dispute Resolution**: Hong Kong has a well-established legal system firmly based on the rule of law. Under the principle of "One Country, Two Systems", Hong Kong's legal system is based on the common law as supplemented by statute law. Over the past decades, Hong

[113] Tim McManus, *Managing big projects: The lessons of experience*, McKinsey, May 2016. Click here

[114] They are the Hong Kong Special Administrative Region and the Macao Special Administrative Region

[115] They are Guangzhou, Shenzhen, Zhuhai, Foshan, Huizhou, Dongguan, Zhongshan, Jiangmen and Zhaoqing

Kong has been one of the world's leading international dispute resolution centres.

14.7 Hong Kong's success is built upon the solid foundations of (i) its international character, (ii) its high-quality and efficient legal services and (iii) the robust legislation and government policy supporting dispute resolution.

14.8 Hong Kong takes pride in the fact that its arbitral awards are enforceable in over 150 Contracting Parties.[116] This is made possible under the United Nations Convention on the Recognition and Enforcement of Foreign Arbitral Awards, also known as the "New York Convention", which applies to Hong Kong. Further, the Panel and the List of Arbitrators maintained by the Hong Kong International Arbitration Centre include different types of arbitrators. These experienced arbitrators come from various countries or regions and are professionally trained and specialised in different jurisdictions and practice areas. They are capable in providing high-quality international legal and dispute resolution services.

14.9 Hong Kong is a hub for international or regional legal and dispute resolution services bodies. The International Chamber of Commerce International Court of Arbitration, the China International Economic and Trade Arbitration Commission and the China Maritime Arbitration Commission have set up offices or arbitration centres in Hong Kong. The China Council for the Promotion of International Trade, in collaboration with the Hong Kong Meditation Centre, has set up the Mainland – Hong Kong Joint Mediation Center, providing a platform for resolving cross-border commercial disputes for Hong Kong and the Mainland. The Hague Conference on Private International Law has also set up its first and only Asia-Pacific Regional Office in Hong Kong since 2013. With the presence of reputable legal and dispute resolution services bodies, excellent arbitration facilities, extensive pool of highly reputable talents (with English, Chinese and other language proficiency) and the capitalistic free-market system, Hong Kong has a solid foundation to develop as an international legal and dispute resolution services centre.

14.10 Last but not least, legislations relating to arbitration and mediation are regularly updated to keep in line with the relevant international standards and latest developments in order to provide a favourable framework for parties to resolve disputes effectively and efficiently by arbitration or mediation.

14.11 **Strong Link with the Mainland**: Hong Kong enjoys full support from the Central People's Government and maintains very close link with the Mainland under the principle of "One Country, Two Systems".

14.12 Being the neighbouring province, Guangdong has always been at the forefront in terms of market access commitments in favour of Hong Kong under the

[116] In the context of the Mainland and Macao, the Arrangement Concerning Mutual Enforcement of Arbitral Awards Between the Mainland and the Hong Kong Special Administrative Region was signed in June 1999; whereas the Arrangement Concerning Reciprocal Recognition and Enforcement of Arbitral Awards between the Hong Kong Special Administrative Region and the Macao Special Administrative Region was signed in January 2013

Mainland and Hong Kong Closer Economic Partnership Arrangement (CEPA). As at August 2018, eleven associations in the form of partnerships between the Hong Kong and Mainland law firms have been approved to be set up, with seven in Shenzhen, two in Guangzhou and two in Zhuhai.

14.13 Hong Kong has made full use of the CEPA framework in buttressing itself as the key dispute resolution centre in the GBA. Of note is the Investment Agreement signed in June 2017 between the Hong Kong Special Administrative Region Government and the Ministry of Commerce under the CEPA framework. It provides a "Mediation Mechanism for Investment Disputes" which encourages Mainland investors to use Hong Kong mediation services to resolve cross-boundary investment disputes relating to the Investment Agreement. Hong Kong investors may also appoint designated Mainland mediation institutions and mediators to assist in resolving similar disputes. The mechanism promotes the broader use of mediation in cross-boundary dispute resolution. The mutually agreed lists of mediation institutions and mediators of both sides were announced in December 2018. A set of mediation rules for adoption by designated mediation institutions and mediators of the respective sides were also announced and put in place.

14.14 Hong Kong spares no efforts in further deepening its co-operation with the Mainland. The recent promulgation by the State Council of its policy to extend the establishment of partnership associations between the Hong Kong and Mainland law firms to the whole of the Mainland, and to allow partnership associations in the China (Guangdong) Pilot Free-Trade Zone to employ Hong Kong lawyers in the name of the partnership associations and to expand the scope of practice that the Mainland lawyers of these partnership associations can undertake, are two vivid examples. Arrangements have also been reached with Mainland authorities on matters relating to mutual assistance on legal matters between Hong Kong and the Mainland. Some of the most prominent ones include:[117]

Arrangement Concerning Mutual Enforcement of Arbitral Awards Between the Mainland and the Hong Kong Special Administrative Region	Arrangement for Mutual Service of Judicial Documents in Civil and Commercial Proceedings between the Mainland and Hong Kong Courts

[117] Similar arrangements have also been concluded between Hong Kong and Macao. They include:

(a) Arrangement for Mutual Service of Judicial Documents in Civil and Commercial Cases between the Hong Kong Special Administrative Region and the Macao Special Administrative Region (not yet entered into force); and

(b) Arrangement Concerning Reciprocal Recognition and Enforcement of Arbitral Awards between the Hong Kong Special Administrative Region and the Macao Special Administrative Region

Arrangement on Reciprocal Recognition and Enforcement of Judgments in Civil and Commercial Matters by the Courts of the Mainland and of the Hong Kong Special Administrative Region Pursuant to Choice of Court Agreements between Parties Concerned	Arrangement on Reciprocal Recognition and Enforcement of Civil Judgments in Matrimonial and Family Cases by the Courts of the Mainland and of the Hong Kong Special Administrative Region (not yet entered into force)
Arrangement on Reciprocal Recognition and Enforcement of Judgments in Civil and Commercial Matters by the Courts of the Mainland and of the Hong Kong Special Administrative Region (not yet entered into force)	Arrangement Concerning Mutual Assistance in Court-ordered Interim Measures in Aid of Arbitral Proceedings by the Courts of the Mainland and of the Hong Kong Special Administrative Region

14.15 Another front for promoting Hong Kong's international legal and dispute resolutions under the China context is to encourage enterprises in the Mainland seeking to "go global". This includes encouraging such enterprises to choose Hong Kong law as the governing law of international transactions, and to choose the Hong Kong Special Administrative Region as the place of dispute resolution for resolving disputes in the relevant commercial and investment agreements.

14.16 It is pivotal that the Shenzhen Court of International Arbitration has chosen Hong Kong as its default seat of arbitration where the parties have not agreed on the seat of arbitration, unless otherwise determined by the arbitral tribunal, as set out in its Guidelines for the Administration of Arbitration under the United Nations Commission on International Trade Law (UNCITRAL) Arbitration Rules. Separately, under the 2017 China Nansha International Arbitration Centre General Rules for Arbitration and Proceedings Guidelines on the Three Models for Arbitration Hearing, the Hong Kong International Arbitration Model was introduced. Under the Guidelines, parties adopting the model would be free not only to apply the Hong Kong Arbitration Ordinance and choose Hong Kong as the seat of arbitration, but also to conduct the arbitration hearing in Hong Kong if the parties prefer.

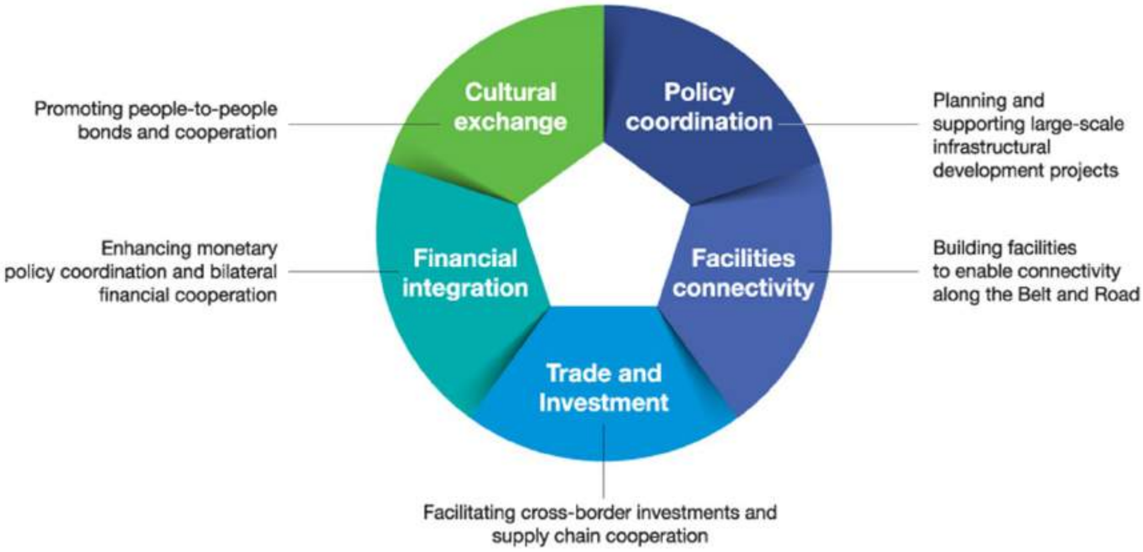
14.17 Hong Kong will continue to advocate for the appointment of more Hong Kong legal and dispute resolution professionals by the Mainland's dispute resolution and relevant institutions and promote Hong Kong as a seat of arbitration.

Challenges Ahead

14.18 Hong Kong should remain vigilant in order to survive in the highly competitive international community. The BRI and the GBA bring unprecedented waves of opportunities. Yet Hong Kong would only be able to harvest the fruits if it is well prepared. This part attempts to highlight some of the major challenges probably faced by Hong Kong under these two grand strategies.

14.19 **BRI**: The BRI refers the Silk Road Economic Belt and 21st Century Maritime Silk Road, a significant development strategy launched by the Chinese government with the intention of promoting economic co-operation among countries along the proposed Belt and Road routes.

14.20 The BRI has the following five key areas of co-operation:



5 Areas of Co-operation from HKTDC[118]

14.21 "Facilities Connectivity" is central to the theme of this Report. In fact, the focus of BRI so far has been on building up infrastructure. It is expected that infrastructure will in turn support cross-border and more efficient movement of goods.[119] The idea of the Silk Road Economic Belt is to focus on rail network because carriage by rail is faster than carriage by sea: "The idea is … to fill up the rail cargo with higher value-added items … and time-sensitive product … like smartphones so that feasibility is dependent on value-addedness of products rather than volume."[120]

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[118] Extracted from *Belt and Road Basics, the Belt and Road Initiative – A Road Map to the Future*, Hong Kong Trade Development Council. Click here

[119] Poomintr Sooksripaisarnkit and Sai Ramani Garimella (eds), *China's One Belt One Road Initiative and Private International Law*, Routledge, 2018, 9

[120] Lim Tai Wei, 'Introduction' in Lim Tai Wai et al. (eds), *China's One Belt One Road Initiative*, Imperial College Press, 2016, 5

14.22 Infrastructure development is however capital-intensive and has a long investment cycle. Studies show that the estimated spending under the BRI vary from US$1 trillion to as much as US$8 trillion.[121] The Asian Development Bank estimates that the Asia-Pacific region will need about US$500 billion in infrastructure annually between 2016 and 2020. Such figure has not yet taken into account the investment demand generated by China.[122] Mr. Zhou Xiaochuan, the former governor of the People's Bank of China, has remarked that the shortfall in infrastructure investment of the Belt and Road region is over US$600 billion every year.[123] This gap cannot be filled by public money alone, nor solely by funding from existing channels such as Asian Infrastructure Investment Bank, New Development Bank (also known as BRICS Development Bank), and Silk Road Fund set up by the Chinese government. This Report hence suggests using securitisation as a promising means in tapping the global institutional capital.

14.23 This Chapter touches on a related yet equally pressing issue – legal risk management under the BRI.

14.24 The more infrastructure projects there will be, the greater the need for legal risk management. Legal risk management shall not be confined to dispute resolution mechanism that can be resorted to after disputes have arisen. On the contrary, legal risk management should commence before a party decides whether to engage in an infrastructure project at a particular place and covers each and every stage of the project thereafter. In short, both dispute resolution and dispute avoidance are of equal importance.

14.25 Generally speaking, legal risk management shall include the following key elements:[124]

Legal due diligence, which should be carried out before concluding an infrastructure deal, facilitates the proper understanding of the legal and regulatory regime of the targeted place of investment
Consideration of the proper mode of contractual arrangement, such as whether a public-private partnership (PPP) or other investment model is more appropriate in any given case

[121] *Expert Insights: Infrastructure investment trends on the Belt and Road*, 20 September 2018. Available here

[122] *US$ 600 billion shortfall in BRI investment*, Xinhua News, 14 August 2018. Available here

[123] Ibid.

[124] Speech by Mr. Rimsky Yuen SC, former Secretary for Justice of the Hong Kong Special Administrative Region, 22nd Anniversary Dinner of the Association of Engineering Professionals in Society Limited 19 September 2017 (Tuesday), "*The Belt and Road Initiative and Infrastructure Dispute Resolution: A Few Thoughts*". Available here

Proper drafting of contract, which can reflect the parties' intention, and cater for contingencies that should be addressed
Design of clauses relating to dispute resolution, which should cover situation both before and after a dispute has arisen, as well as dispute prevention and other incidental matters such as choice of law

14.26 When put in the context of BRI, legal risk management becomes not just important, but indispensable. The best approach is to embrace all the jurisdictions along the Belt and Road by understanding their differences and by dealing with them head-on by way of proper legal risk management. Yet this is a daunting task when one thinks of the vast divergence they may have in terms of, among others, diverging legal systems, different legal culture and traditions, significant language barriers, sheer geographical distance and varying stages of economic development.

14.27 The big question is thus: how can a sound legal risk management be carried out?

14.28 **GBA**: The development of the GBA is accorded the status of key strategic planning in the country's development blueprint. Following the promulgation of the Outline Development Plan for the Guangdong-Hong Kong-Macao Greater Bay Area on 18 February 2019, Hong Kong will proactively integrate into the overall national development. In achieving that end, we do not under-estimate the complexity in co-ordinating with the other 10 local governments in the GBA, nor do we overlook the keen competition in GBA, given the fact that GBA covers a total area of 56,000 km2 and a total population of around 70 million as at end 2017. This poses as another challenge for Hong Kong.

Opportunities Abound

14.29 To better cope with the challenges and to harness the additional opportunities offered by the BRI and the GBA, the Inclusive Dispute Avoidance and Resolution Office (IDAR Office) has been established within the Department of Justice, which will work directly under the steer of the Secretary for Justice. The establishment of the IDAR Office will help better co-ordinate and implement various initiatives that the Department of Justice has been undertaking in the areas of dispute avoidance and resolution.

14.30 The IDAR Office's objective is to facilitate access to justice and provide equal opportunities for people from all walks of life and for all sectors of the economy without boundary, advancing Goal 16 of the United Nations 2030 Sustainable Development Goals in this region and beyond.

The Map

Map of GBA from the Government of
the Hong Kong Special Administrative Region[125]

14.31 Goal 16[126] emphasises the promotion of peaceful and inclusive societies for sustainable development, the provision of access to justice for all and the building of effective, accountable and inclusive institutions at all levels. As President Xi Jinping explained, the United Nations 2030 Sustainable Development Goals are part of our national development strategies, and we should "promote coordinated advances in the economic, social and environmental fields, pursue inclusive development in keeping with our respective national conditions, and forge equal and balanced global development partnerships".[127]

14.32 With Goal 16 in mind, the last part of this Chapter makes the following two suggestions which may help buttress Hong Kong's position as an international legal hub and preparing itself for the upcoming challenges. They are (i) online dispute resolution (ODR) and (ii) bespoke dispute avoidance and resolution rules.

14.33 **ODR**: In 2016, UNCITRAL published the Technical Notes on Online Dispute Resolution to foster the development of ODR in the world and to assist ODR administrators, platforms, neutrals, and parties to ODR proceedings. The

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[125] As extracted from the webpage of Constitutional and Mainland Affairs Bureau of the Government of the Hong Kong Special Administrative Region. See here at www.bayarea.gov.hk

[126] Further information available here at www.un.org

[127] See President Xi Jinping's speech at the APEC CEO Summit on 17 November 2018. Available here at www.xinhuanet.com

United Nations General Assembly (GA) has recognised that ODR (as provided in the UNCITRAL ODR Technical Notes) "can assist the parties in resolving disputes in a simple, fast, flexible, and secure manner, without the need for physical presence at a meeting or hearing."[128] By applying modern technology to traditional dispute resolution, the whole process can become much faster, affordable and user-friendly. The GA requests all States to "support the promotion and use of the UNCITRAL ODR Technical Notes."[129]

14.34 In this connection, we believe that an Electronic Business Related Arbitration and Mediation (eBRAM) platform would be pivotal in the development of LawTech in Hong Kong and consolidation of Hong Kong's status in the provision of professional legal services. eBRAM would have the following features which make it particularly suitable for the BRI and GBA.

14.35 The eBRAM platform will enhance connectivity and provide special artificial intelligence (AI) functions to facilitate deal-making, transaction and dispute resolution.

14.36 AI applications on machine translation will enable the eBRAM platform to deliver better performance in text translation over the conventional natural language translation systems. Recent technological breakthrough in computing deep learning will be employed to train the eBRAM platform's deep neutral engine with adequate domain-specific translation cases. It would be useful on applying AI translation in Chinese, English, Russian, Arabic and Spanish in the context of BRI and GBA.

14.37 AI on online chat and transcription tasks will be adopted for the application, bringing in the capability of real-time translation on chat-style sentences. Another application of the AI engine will be on verbal utterance such as to transcribe the recording of online hearing.

14.38 The eBRAM platform will further support multiple, secure, convenient and modern payment methods, such as credit cards, TT transfer, PayPal, e-Cheque and Fast Payment System.

14.39 The eBRAM platform make further use of AI in enhancing the security of the process.

14.40 AI can be used for continuous user authentication for access security and proper handling of procedures. This will guard against hacker stealing / hijacking user login sessions which is not uncommon in internet-access systems. Video analytics of facial recognition, silhouette tracking, or alike will be employed.

14.41 Blockchain technology will be adopted to give eBRAM platform ultimate security in non-repudiated transaction records, and thus enable the eBRAM platform a

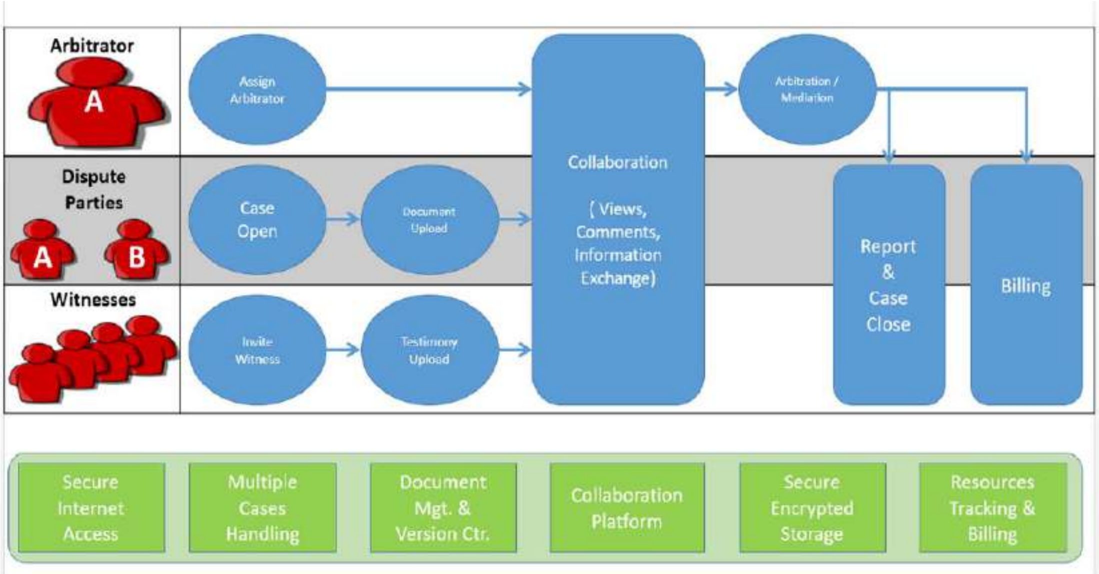
[128] GA Resolution 71/138, *UNCITRAL Technical Notes on Online Dispute Resolution*, 13 December 2016

[129] GA Resolution 71/138, *supra*

well-protected infrastructure for the upload, download and exchange of case materials by authenticated parties.

14.42 The eBRAM platform will be operated and maintained in cloud-based and secure IT infrastructure. Users are able to flexibly scale up services to their needs and customise applications as well as access the eBRAM platform anywhere around the world with only an internet connection.

14.43 It is desirable to allow users to select neutrals rather than have them imposed by any platform. The eBRAM platform will be designed to provide panels of neutrals, and to facilitate parties' nomination and selection for appointment.



Workflow of eBRAM[130]

14.44 The eBRAM platform will help maintain online panels of neutrals from different areas of expertise and different levels of experience. It will also enable parties to nominate neutrals who are not on the eBRAM platform panels for consideration for appointment.

14.45 Being a cosmopolitan city, Hong Kong has unique advantage in respect of the market for ODR services among Belt and Road jurisdictions and in the GBA given our legal and judicial systems with the common law preserved, the multilingual abilities of our talents and our reputation as a leading international financial centre as well as an international legal and dispute resolution services centre in the Asia-Pacific Region. ODR, or eBRAM in particular, is an area which is worth Hong Kong's attention.

14.46 **Bespoke Dispute Avoidance and Resolution Rules**: Given the complex nature of infrastructure projects, it would be essential if parties could proactively manage differences to prevent them from escalating into disputes, and to minimise the risks of time and cost overruns. If there is a protocol in place which governs both dispute avoidance and dispute resolution over the life cycle of an

[130] As extracted from the PowerPoint presentation titled "*Belt and Road e-arbitration and e-mediation*" by Ms Teresa Cheng GBS SC JP, Secretary for Justice on 11 September 2017 at Belt and Road Summit

infrastructure, that would be a useful tool in legal risk management for mega projects not uncommonly found along the Belt and Road and in the GBA. Consideration should be given to incorporating ODR in the securitisation mechanism in order to provide for an integrated, efficient and cost-effective one-stop service for the users.

14.47 In this regard, reference may be drawn to the new Singapore Infrastructure Dispute-Management Protocol launched by the Ministry of Law of Singapore on 23 October 2018 (the Protocol).[131]

14.48 The Protocol is a dispute management mechanism.[132] It sets out, amongst others, the framework for a Dispute Board (DB), its dispute resolution processes as well as its powers.

14.49 The DB follows the infrastructure project from beginning to end and proactively helps to manage legal, technical or operational issues as they arise from time to time. DB assists the resolution of differences by facilitating discussions among senior representatives of the parties. Such assistance is to enable the parties to continue with their negotiations to avoid or resolve the difference on their own without further reference to the DB.

14.50 In the event of a dispute, the Protocol provides several methods of resolution – mediation, opinion or determination. A settlement agreement reached between the parties at a mediation, an opinion (which is not objected to), and a determination (which is not contested to) are binding on the parties.[133]

14.51 As the saying goes, "prevention is better than cure": issues are anticipated and differences are prevented from snowballing and escalating into full-blown disputes which may become challenging to resolve. In averting a dispute altogether, the other mode of dispute resolution need not be triggered, thus saving time and cost. On the other hand, should dispute prove to be unavoidable, the Protocol may assist in eliminating extraneous matters and narrowing down issues for adjudication or mediation, which in turn save time and cost.[134]

14.52 Consideration may be given to developing in Hong Kong a similar framework to that of the Protocol, which allows a customised and flexible combination of dispute avoidance and resolution methods. This may provide an additional avenue to resolve many of the problems for infrastructure securitisation.

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[131] A copy of the Protocol can be downloaded here at app.mlaw.gov.sg

[132] Chuah C. & Sutedja C.A., *Singapore Infrastructure Dispute-Management Protocol*, Legiswatch, 2018. Available here

[133] Ibid.

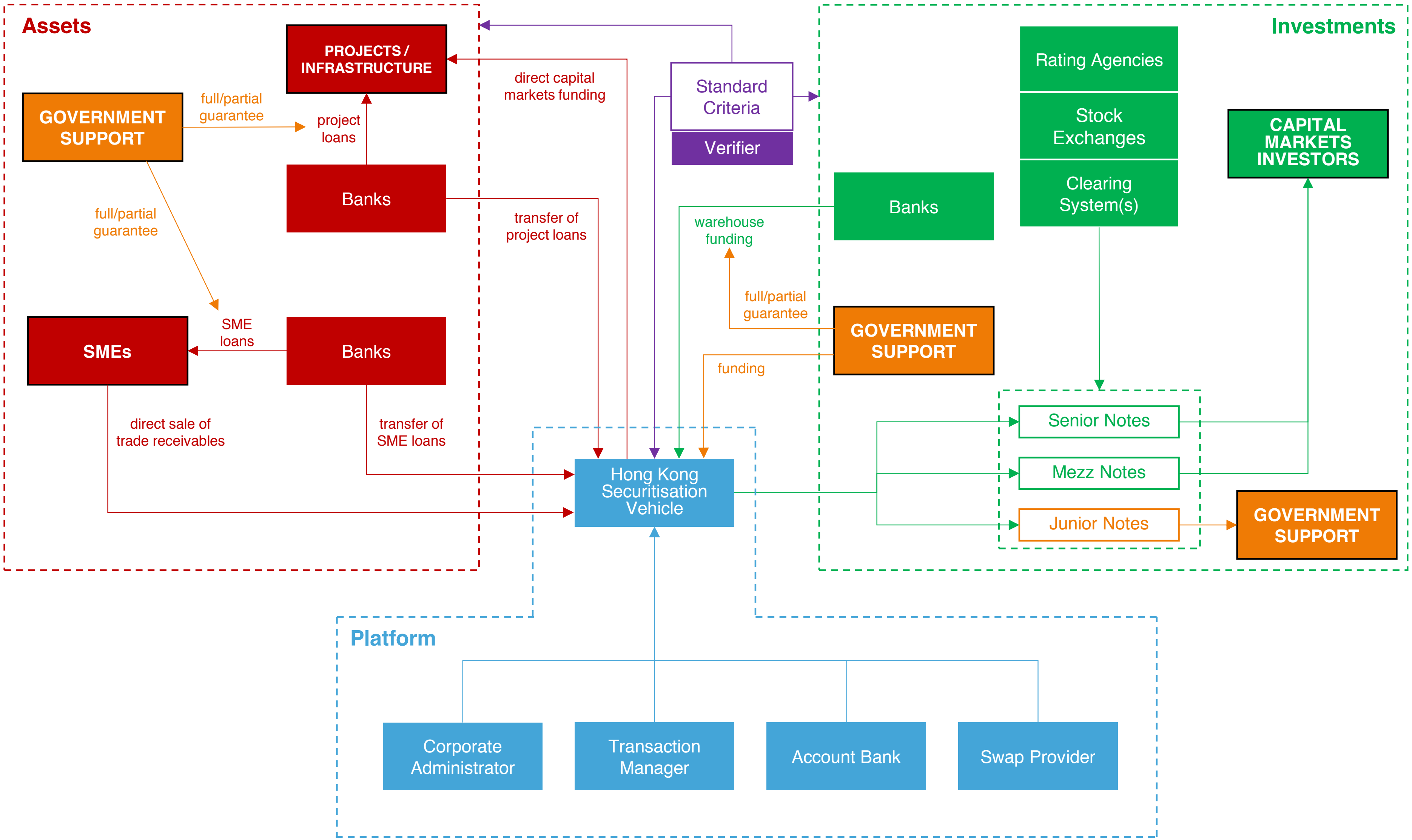
[134] Ibid.

“…securitisation proposals will complete the last reminaing elements which will make Hong Kong into the “International Hub for Securitisation” of Asia, catering to international infrastructure projects and the securitisation of Small and Medium Enterprise Financing in the Greater Bay Area. That will create a revolution in at least the same scale as that of H Shares, if not more…”

– Anthony Francis Neoh, QC, SC, JP

Appendices

A Blueprint for a Hong Kong Securitisation Platform



Comments from the Joint Forum on 15 October 2018

On 15 October 2018, the Asia-Pacific Structured Finance Association and The Hong Kong Institute of Bankers co-hosted the *Forum-cum-dialogue on "Belt and Road: Infrastructure Financing"* at the Hong Kong Convention and Exhibition Centre. The event welcomed many distinguished speakers and a selection of their comments follow. This Report builds on the topics and themes which were explored at that event.

We would like to acknowledge and thank the following sponsors of the *Forum-cum-Dialogue on "Belt and Road Initiative: Infrastructure Financing"* held at the Hong Kong Convention and Exhibition Centre on 15 October 2018: Bank of China (Hong Kong) Limited, Bank of Communications Co., Ltd., China CITIC Bank International Limited, China Everbright Bank, Co., Ltd., Citibank, N.A., CMB Wing Lung Bank Limited, Dakin Capital, DBS Bank (Hong Kong) Limited, Everbright Holdings, Fubon Bank (Hong Kong) Limited, Hang Seng Bank Limited, HSBC, Industrial and Commercial Bank of China (Asia) Limited, Industrial Bank Co., Ltd., Nanyang Commercial Bank Limited, OCBC Wing Hang Bank Limited and Shanghai Commercial Bank Limited.

Norman Chan

Former Chief Executive of the HKMA

…the reputation of financial derivatives was badly damaged during the Global Financial Crisis. The mortgage-backed securities, CDO, CDO2 and CDO3, etc. all got a bad name, for good reasons. While there are still widespread scepticism and even resentment to the label of financial derivatives or financial engineering, I think it is important for us to be able to differentiate between those structured finance products that are linked to and supportive of the real economy from those that have no useful links to the real economy. Clearly ordinary mortgage-backed securities with proper underwriting standards, not the kind of sub-prime mortgages in the U.S., are one of this kind of useful financial derivatives. Infrastructure loan backed securities can be another kind of useful structured finance because, if properly organised, they can bring about a win-win outcome for the investors, the recipient countries, the intermediaries and the capital markets. As I said earlier, infrastructure investments are one of the most difficult kind of asset class and to create a structured finance for these investments is not going to be an easy or short process, but as the Chinese saying "千里之行，始於足下" goes, no matter how long the journey is going to take, one has to make a start somehow. So here we are, the HKMC is going to take the first step in pursuing the securitisation of infrastructure loans in order to facilitate a more efficient flow of capital into infrastructure investments…

Shi Yulong

China Academy of Macroeconomic Research

…there are six major tasks the BRI must face: (i) improve the long-term mechanism, (ii) set up a trade promotion platform, guide enterprises to invest and cooperate in the BRI countries and develop a new industrial practice and new models for trade, (iii) accelerate the formation of financial support, guide private funds to be jointly invested in the projects, and provide foreign exchange support for going-out enterprises, (iv) promote humanities and cultural exchanges, (v) regulate corporate investment and business practices and (vi) pay attention to risk prevention.

Hong Kong has world-class legal, financial, and architectural systems as well as talents. Based on its unique geography and systemic advantages, Hong Kong should assume a more important role in leading infrastructure financing of BRI.

Hu Zhirong

China Development Bank

…the BRI has developed from the initial regional cooperation to the world's largest open platform for cooperation. Infrastructure construction has taken up a foundational and leading role in social and economic developments. Infrastructure interconnection facilitates optimising resource allocation and restructuring the industry development chain.

[I] also stress the needs for BRI to build a more open platform and attract all sorts of funds to participate. [I suggest] to fully utilise the advantages of Hong Kong to promote the "One Belt, One Road" infrastructure financing. The source of funds and the nature thereof should be more open. The financial industry needs to enhance the financing models and financial product innovation, as a standardised product is difficult to meet all needs.

Anthony Francis Neoh

Fellow of the Academy of Finance

…there are three key takeaways from the forum. First, after five years, the BRI has become a major global plan, whereby China shares with the BRI countries its 40 years' experiences in infrastructure construction. Second, in respect of BRI financing, Hong Kong plays an important role. Third, infrastructure projects given their long construction periods, bring huge challenges to financing. How to structure the financing and manage all the risk is both the opportunity and challenge to the financial industry.

Peter Burnett

Standard Chartered Bank

Securitisation of project finance or infrastructure loans on bank balance sheets is a relatively new development in this part of the world but I do think it is an area that needs to be developed further because of all the benefits that it brings. The most important benefits are that securitisation builds financial capacity by mobilising a new pool of institutional capital, freeing up capital on the bank balance sheet, so you have an opportunity to recycle bank capital, creating a new asset class for infrastructure investment a security which is tradeable and building accessibility improvement for investors.

With infrastructure securitisation we have to start with looking at the underlying projects, because securitisation is only built on the back of the assets which go into it. Without good solid infrastructure projects you will not have good solid infrastructure securitisations. Good solid infrastructure is a must; infrastructure underlies the development of our communities. We need good cities and good roads to support the welfare of the people…

Securitisation acts as a channel, to match borrowers with lenders. It's not too fancy, but it can split up the risk into junior, mezzanine and senior risk and it is this tranching technique which allows investors to pick and choose their investments based on their risk appetite…

We have to develop a platform to channel the abundant capital available in the financial markets and move it, if only a little bit of it, to bridge the infrastructure funding gap. But to attract investors in those financial markets you need good projects and not just one, but a pipeline. You need to give investors options and you need to set basic criteria so that investors can get familiar with common standards. Infrastructure securitisation is not about a single transaction but about developing a platform for infrastructure projects to access the capital markets.

Susie Cheung

Asia-Pacific Structured Finance Association

Carrie Leung

The Hong Kong Institute of Bankers

Hong Kong has always been a leader in financing, and it is now poised to become a regional securitisation hub with the full support of the government as well as the banking community. A well-established industry will create job opportunities for local banking and financial services professionals to ensure we can deliver a securitisation framework that reaches the highest international standards. There are already a number of professionals with extensive experience of securitisation, but in order to strengthen the talent pool further, we need to enhance our efforts to broaden and deepen this knowledge base to reach a larger number of practitioners. Securitisation encompasses more than issuance and underwriting, and one of the next steps will be to set out best practices in key areas such as documentation, credit risk management and insurance in which local financial services practitioners can actively participate. The Hong Kong Institute of Bankers is uniquely positioned to work with the relevant product experts to train the next generation of banking professionals in securitisation. We were honoured to co-organise the Belt and Road forum with the Asia-Pacific Structured Finance Association in 2018 in Hong Kong, and this report is the next strategic step in the realisation of business opportunities.

With greater synergies to be achieved between investors, regulators, the government and the banking and financial community, Hong Kong is set to play a pivotal role in not just facilitating structured finance for regional projects, but also diversifying risks and freeing up bank capital that can lead to positive impact on the economy and businesses.

Kyson Ho

HSBC

We've heard a lot about the benefits of securitisation. I want to touch on how easy or difficult it is to achieve some of those benefits. Securitisation is a very complex topic and if you don't think about securitisation as part of a project's future at the time you're negotiating it you may end up with a project that cannot be used in securitisation, severely limited its future financing options. Thinking about securitisation up front and how it can provide benefits at different points of the project's life cycle will help solve many of the issues which limit the use of securitisation.

The ADB estimates that developing Asia requires at least US$1.8 trillion [135] in infrastructure expenditure per annum between 2016 and 2030 to maintain economic growth, eradicate poverty and respond to climate change. The sheer size of this funding need represents a major challenge for governments around the region and creates an exciting opportunity for private and institutional sources of capital. As one of the largest financial services hubs in the region, Hong Kong has an important role to play in facilitating attractive investment opportunities for these groups.

Institutional investors are more commonly attracted to existing brown-field, or operational infrastructure with stable and predictable cash flow profiles, rather than new green-field infrastructure – particularly in developing Asian markets. Governments and asset owners that are open to institutional investment in existing assets will lift their profile in the global investment community, whilst creating opportunities to reinvest or "recycle" asset sale proceeds into "riskier" new green-field infrastructure. This approach has the potential to create win:win outcomes; reducing the regional infrastructure funding gap and growing the regional institutional infrastructure investment market. In due course, this also has the potential to stimulate institutional and private investment activity in new green-field infrastructure as investors become increasingly familiar and comfortable with local market risk and return dynamics.

Michael Camerlengo

KPMG

Wilfred Lau

ARUP

From the engineering perspective and to ensure a duly and timely executed construction project, the following two effective approaches should be adopted throughout the project life cycle to mitigate the technical risks which may arise as the project evolves: First, the project should support the long-term vison and meet the needs of the host country. Secondly, each phased-development of the project, i.e., the planning, procurement and execution of the project, should be premised on good governance principles by reference to the industry's best practice and criteria established by international agencies and industry associations.

[135] ADB (June 2018)

James Pedley

Clifford Chance

Securitisation can be a powerful funding tool to connect capital markets investors to infrastructure and SMEs. The legal environment should facilitate pooling and isolating the cashflows relating to infrastructure and SMEs and participants and delivering them to investors in a variety of forms tailored to the particular investor's risk profile. Hong Kong has a deep-rooted legal tradition, with a modern dispute resolution regime, and is a perfect jurisdiction in which to build a securitisation hub.

Zhu Qi

CMB Wing Lung Bank

…all the commercial banks in Hong Kong believe the BRI contains huge business opportunities as well as risk. Commercial banks need to find a suitable entry point. The experience and lessons learned in the past 40 years from the participation of Chinese commercial banks in China's infrastructure construction can be used as a good reference for BRI infrastructure projects.

Song Zuojun

China Development Bank

China Development Bank actively participates in local infrastructure master planning in China as well as the countries along the Belt and Road. Participating in master planning can help create a pipeline of financing projects and reduce the overall project risk.

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